



REPUBLIC OF EGYPT

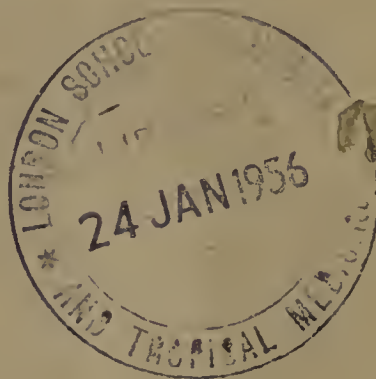
MINISTRY OF PUBLIC HEALTH, EGYPT

ANNUAL REPORT

ON THE WORK OF THE

Ministry of Public Health

for the Year 1951



Government Press, Cairo 1955

GOVERNMENT PUBLICATIONS are on Sale at the "Sale Room" Ministry of Finance and Economy. Correspondence relating to these publications should be addressed to the "PUBLICATIONS OFFICE," Government Press, Cairo.

Price - - - - - P.T. 295



REPUBLIC OF EGYPT

MINISTRY OF PUBLIC HEALTH, EGYPT

ANNUAL REPORT

ON THE WORK OF THE

Ministry of Public Health

for the Year 1951

Government Press, Cairo 1955

GOVERNMENT PUBLICATIONS are on Sale at the "Sale Room" Ministry of Finance and Economy. Correspondence relating to these publications should be addressed to the "PUBLICATIONS OFFICE," Government Press, Cairo.

Price - - - - - P.T. 295

CONTENTS

Part I.—PUBLIC HEALTH

Chapter		Page
I.—Vital Statistics	...	1
II.—Infectious Diseases Control	...	19
III.—Nutrition	...	42
IV.—Food Control	...	44
V.—Rural Health	...	48
VI.—Quarantine	...	56
VII.—Permits	...	78
VIII.—State of Public Health in Cairo and Alexandria	...	79
IX.—International Health	...	90
X.—Medical Permits	...	93

Part II.—SOCIAL HYGIENE

Chapter	XI.—Maternity and Child Welfare	95
„	XII.—Chest Diseases	97
„	XIII.—Venereal and Skin Diseases	127
„	XIV.—Mental Health	140
„	XV.—Health Education and Social Services	142

Part III.—MEDICAL TREATMENT

Chapter	XVI.—General Hospitals	144
„	XVII.—Ophthalmic Hospitals	146
„	XVIII.—Pharmacies	148
„	XIX.—Universities Hospitals	150

Part IV.—ENDEMIC DISEASES

Chapter	XX.—Bilharzia and Ancylostoma Treatment	153
„	XXI.—Malaria	157
„	XXII.—Insect Control	180
„	XXIII.—Bilharzia Snail Control	195
„	XXIV.—Leprosy Control	197

Part V.—RESEARCHES AND LABORATORY EXAMINATIONS

Chapter	XXV.—Summary of the Work of the Department of Laboratories	208
„	XXVI.—Summary of the Work of the Research Institute for Tropical Diseases	209
„	XXVII.—Summary of the Work of the Memorial Ophthalmic Laboratory, Giza	212

Part VI.—APPENDICES

Appendix	I.—Report on the Work of the Central, Governorate and Provincial Medical Commissions	213
„	II.—Details of Budget Grants and Actual Expenditures and details of Ports in the Various Departments	220
„	III.—Report on the Work of the Central Stores	224

MINISTRY OF PUBLIC HEALTH

ANNUAL REPORT FOR THE YEAR 1951

Part I.—PUBLIC HEALTH

Chapter I.—Vital Statistics

A.—Population :

The estimated population of Egypt in mid-year 1951 was 20,871,300 *i.e.* an increase of 478,700 inhabitants or 2.3% over 1950. The following table gives the average annual rate of increase of the population since 1907 :

Years	Average annual rate of increase per cent
1907-1916	1.239
1917-1926	1.101
1927-1936	1.126
1937-1946	1.849
1947-1948	2.227
1948-1949	2.018
1949-1950	2.226
1950-1951	2.347

The progressive rise in the annual rate of increase indicates that the population of Egypt as a whole is rapidly increasing, a fact that calls for careful studies to escape such serious consequences as may ensue. Among these consequences may be cited the failure of the cultivated areas to produce enough food for the population and failure of present revenues to meet the government's financial obligations towards public services.

Table No. 1 gives the age and sex distribution of the population and the ratio per thousand of each age group to total population. It shows that the ratios for age-groups up to 30 years are high which indicates that the Egyptian population is young. The ratios after 30 years age groups are low, and the average age is 36 for males and 42 for females.

B.—Births (Table No. 2).

The number of births recorded throughout Egypt during the year was 933,959 or 44.7 per thousand of the population, as against 44.4 in 1950. Table No. 2 shows that the birth rate is steadily rising in Egypt. It is indeed very high as compared with other nations. It may be safely said that it is one of the highest in the world. During the past 10 years, the birth-rate varied between 38.2 in 1942 and 44.7 in 1951. The highest birth-rate in 1951 was recorded in the governorates, being 52 per thousand. The lowest was in Upper Egypt Provinces being 38.9.

In Lower Egypt provinces, the ratio was 46.7. The lower birth-rate in Upper Egypt may be explained by the migration of able men to other parts of the country particularly to the Governorates in search of a living (Table No. 8). Table No. 4 shows that the highest birth-rate of 42 per thousand of population was recorded during the month of December; the lowest, 38.6, was recorded during May. The same table shows a preponderance of male births being 917 females for every 1000 males.

C.—Deaths :

A total of 402 158 deaths were recorded throughout Egypt this year or a death rate of 19.3 per thousand population. This is almost the same death rate as last year, i.e. 19.1. Perus 1 of table No. 2 shows that the death rates have been on the decline since 1947. The highest death rate for 1951 was recorded in the governorates, i.e. 21.8. The lowest, 18.1, was recorded in Upper Egypt provinces. A death rate of 19.2 was recorded in Lower Egypt provinces. The low death rate recorded in Upper Egypt provinces is attributed to inaccurate reporting of deaths. The high death rate in the governorates, particularly in Suez, is explained by the migration of able men from Upper Egypt so that the real population is in effect more than the estimated population which is the basis of calculation.

Table No. 3 shows that the highest death rates were recorded during the 2nd and 3rd quarters, namely, 21.6 and 21.1 per thousand. The lowest was recorded during the 4th quarter, 16.4 per thousand.

D.—Age and Sex Distribution of Deaths :

Table No. 9 gives the number and rates of deaths distributed according to age and sex. It shows that about 60% of the deaths occur during the first five years of age. This excessively high death rate is best conceived in comparison with rates of other advanced countries. It is 8% in England and Wales. This calls for more medical care of pregnant and children up to 5 years old, if any improvement in the general death rate is to be realized.

The same table shows that the death rate is higher among males than females, namely 20.7 per thousand for the former and 17.9 for the latter. This increase is common in all age groups, except the over 85 age group.

E.—Infantile Deaths :

The total number of infantile deaths recorded in all Egypt was 120,154 or 129 deaths per thousand births as compared with 130 in the previous year. Infantile deaths recorded in localities having health offices totalled 70,742 or 166.4 per 1000 births as against 170.9 in 1950 (Table No. 11). This table also shows that diarrhoea and enteritis still account for the majority of infantile deaths. Congenital debility comes next in importance. Table No. 11 gives infantile deaths in localities having health offices distributed according to age and cause of death. It shows that 22% or one fifth of infantile deaths occur during the first month of life and that 73% of these are due to congenital debility. After the second month of life, diarrhoea and enteritis figure foremost among causes of infantile deaths. It is observed that the general practice is for medical officers of health to diagnose the cause of all infantile deaths as congenital debility if the infant is a new born and as diarrhoea and enteritis if the infant is more than two or three months old. It is suggested that every possible means be adopted for more accurate diagnosis of infantile deaths.

Table No. 7 shows that the highest infantile death rate of 169 per 1000 births was recorded in the governorates and the lowest, 109, was recorded in Lower Egypt provinces. In Upper Egypt provinces the rate was 129. Again the high infantile death rate in the governorates is attributed to accurate reporting. The infantile death rate for all Egypt is on the whole very high and calls for more attention, since the state of public health in any country is reflected by its infantile death rate.

TABLE NO. 1.—ESTIMATED POPULATION BY AGE AND SEX IN 1951

Age Groups								Males	Females	TOTAL	Proportion per 1000 of Total
0- 1 Year	...	...	...	...	...	...	...	283,800	274,900	558,700	26·8
1- 5 Years	...	...	...	...	...	...	...	1,124,300	1,161,400	2,285,700	109·5
6- 9	„	...	...	...	...	...	...	1,330,200	1,310,800	2,641,000	126·5
10-14	„	...	...	...	...	...	...	1,257,100	1,178,700	2,435,800	116·7
15-19	„	...	...	...	...	...	...	1,082,700	1,009,500	2,092,200	100·2
20-24	„	...	...	...	...	...	...	745,800	777,000	1,522,800	72·9
25-29	„	...	...	...	...	...	...	754,600	865,500	1,620,100	77·6
30-34	„	...	...	...	...	...	...	682,300	758,800	1,441,100	69·0
35-39	„	...	...	...	...	...	...	725,500	719,300	1,444,800	69·2
40-44	„	...	...	...	...	...	...	626,300	623,200	1,249,500	59·9
45-49	„	...	...	...	...	...	...	471,500	456,900	928,400	44·5
50-54	„	...	...	...	...	...	...	463,500	493,600	957,100	45·9
55-59	„	...	...	...	...	...	...	188,300	190,400	378,700	18·1
60-64	„	...	...	...	...	...	...	277,300	328,800	606,100	29·0
65-69	„	...	...	...	...	...	...	92,300	90,400	182,700	13·5
70-74	„	...	...	...	...	...	...	118,600	150,500	269,100	12·9
75-79	„	...	...	...	...	...	...	25,800	26,400	52,200	2·5
80-84	„	...	...	...	...	...	...	38,300	57,900	96,200	4·6
85-89	„	...	...	...	...	...	...	5,300	6,200	11,500	0·6
80-94	„	...	...	...	...	...	...	9,700	14,600	24,300	1·2
90-99	„	...	...	...	...	...	...	1,600	1,800	3,400	0·2
100 Years and over	...	...	...	...	...	...	...	2,400	3,300	5,700	0·3
Not stated	...	...	...	...	...	...	...	27,600	36,600	64,200	3·1
TOTAL								10,334,800	10,536,500	20,871,300	

TABLE NO. 2.—BIRTHS, DEATHS AND RATES PER 1,000 POPULATION
AND INFANTILE MORTALITY RATES 1939-1951

Years	Live Births	Deaths	Natural Increase	Birth-Rate Per 1,000 Pop.	Death-Rate Per 1,000 Pop.	Infantile Mortality Rate Per 1,000 Live Births
1939	696,746	429,033	267,713	42·2	26·0	161
1940	697,700	444,448	253,252	41·6	26·5	162
1941	695,016	440,981	254,035	40·8	25·9	150
1942	658,324	494,358	163,966	38·2	28·7	168
1943	689,771	492,644	197,127	39·6	28·3	160
1944	722,166	472,234	249,932	41·0	26·8	152
1945	787,502	512,003	275,499	43·9	28·6	153
1946	774,152	469,382	304,770	42·6	25·8	141
1947	834,557	408,577	425,980	43·5	21·3	127
1948	832,728	397,976	434,752	42·5	20·3	139
1949	836,516	410,524	425,992	41·9	20·6	135
1950	904,941	388,944	515,997	44·4	19·1	130
1951	933,959	402,158	531,801	44·7	19·3	129

TABLE No. 3.—DEATHS AND DEATH-RATES REGISTERED QUARTERLY IN EGYPT

Years	Quarter Ended				Quarter Ended			
	March	June	September	December	March	June	September	December
Male Deaths								
1942	57,024	78,544	70,071	62,740	47,208	68,590	51,874	50,307
1943	58,690	69,137	71,461	70,096	47,015	58,712	61,239	56,294
1944	61,059	69,029	70,457	57,025	48,733	59,308	60,175	46,448
1945	55,687	69,307	85,914	66,032	44,935	60,612	75,509	54,007
1946	71,014	72,047	64,521	53,089	51,415	61,661	55,845	44,790
1947	43,030	49,577	60,302	67,938	35,468	42,657	52,105	57,500
1948	42,411	56,638	66,696	50,473	36,494	47,616	60,151	41,497
1949	48,324	62,098	63,321	44,358	41,159	56,776	56,896	37,592
1950	44,189	51,675	61,568	49,732	37,474	45,958	55,705	42,643
1951	49,281	59,287	58,607	46,802	43,536	53,298	52,072	39,275
Total of Deaths					Annual Death rate per 1,000 Persons Living			
1942	104,232	147,134	129,945	113,047	24·5	34·3	29·9	26 0
1943	105,705	127,849	132,700	126,390	24·6	29·4	30·2	28·8
1944	109,793	128,337	130,632	103,473	25·0	29·2	29·4	23·3
1945	100,622	129,919	161,423	120,039	22·8	29·1	35·7	26·6
1946	117,429	133,708	120,366	97,879	26·3	31·3	26·3	21·4
1947	78,498	92,234	112,407	125,438	16·6	19·3	23·3	26·0
1948	78,905	100,254	126,847	91,970	16·2	20·6	25·6	18·6
1949	89,483	118,874	120,217	81,950	18·2	23·9	23·9	16·3
1950	81,663	97,633	117,273	92,375	16·3	19·2	22·8	18·0
1951	92,817	112,585	110,679	86,077	18·0	21·6	21·1	16·4

TABLE No. 4.—MONTHLY BIRTHS, DEATHS AND RATES BY SEX, EGYPT 1951.

Months		Births			Birth Rate Per 1000 Pop.	Deaths		Death Rate Per 1000 Pop.
		Males	Females	TOTAL		Males	Females	
January	...	45,156	39,565	84,721	47·8	18,521	16,198	19·6
February	...	40,276	36,490	76,766	48·0	14,863	13,143	17·5
March	...	43,289	39,888	83,177	47·0	15,897	14,195	17·0
April	...	36,270	33,504	69,774	40·7	17,758	15,933	19·6
May	...	35,789	32,559	68,348	38·6	21,258	18,922	22·7
June	...	35,869	32,074	67,943	39·6	20,271	18,443	22·6
July	...	39,363	35,615	74,978	42·4	22,151	19,433	23·5
August	...	39,634	36,193	75,827	42·8	19,907	17,793	21·3
September	...	38,889	35,231	74,120	43·2	16,549	14,846	18·3
October	...	42,662	39,424	82,086	46·4	16,330	13,656	16·9
November	...	43,570	40,594	84,164	49·1	15,011	12,627	16·1
December	...	46,457	45,598	92,055	52·0	15,461	12,992	16·1
TOTAL	...	487,224	446,735	933,959	44·7	213,977	188,181	19·3

TABLE No. 5.—MONTHLY DEATH RATE PER 1,000 OF POPULATION 1942—1951

Month	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951
January	24·6	26·0	28·0	23·6	25·8	19·0	15·9	18·9	16·9	19·6
February	24·1	21·7	23·2	20·9	24·5	15·9	16·4	18·5	16·8	17·5
March	23·8	25·1	24·3	22·8	27·3	14·8	16·2	17·3	15·1	17·0
April	27·8	26·0	25·3	21·9	27·1	16·3	15·4	18·4	17·0	19·6
May	34·2	30·3	29·2	29·1	30·3	18·8	20·0	24·4	19·2	22·7
June	39·5	31·8	32·8	36·1	30·9	22·9	26·2	28·9	21·4	22·6
July	33·9	33·8	33·7	39·1	29·0	25·5	27·4	27·2	22·8	23·5
August	28·1	31·1	29·9	37·3	26·5	23·3	27·0	24·7	23·8	21·3
September	24·8	26·3	25·2	31·5	24·1	21·0	22·7	19·7	19·8	18·3
October	25·1	29·5	24·3	27·7	22·6	38·2	19·2	16·7	18·7	16·9
November	25·4	27·5	23·3	25·0	20·1	22·9	18·2	15·7	17·5	16·1
December	25·6	30·0	22·8	27·7	22·0	16·7	18·6	16·5	17·7	16·1
TOTAL	28·7	28·3	26·8	28·6	25·8	21·3	20·3	20·6	19·1	19·3

TABLE No. 6.—BIRTHS, DEATHS AND INFANT MORTALITY BY GOVERNORATES AND PROVINCES 1942-1951

Localities	1942			1943			1944			1945			1946		
	B.	D.	In. M.	B.	D.	In. M.	B.	D.	In. M.	B.	D.	In. M.	B.	D.	In. M.
Cairo ...	65,231	52,081	16,159	76,148	54,065	18,023	85,788	53,583	18,420	90,467	50,559	18,749	94,831	52,511	19,006
Alexandria ...	25,205	18,475	5,149	32,986	24,313	8,259	39,846	22,487	8,661	42,816	26,761	10,355	41,860	23,540	8,391
Ismailia ...	2,412	2,085	473	3,605	2,411	678	4,250	2,632	780	4,564	2,314	766	4,579	2,255	745
Port Said ...	5,173	3,561	952	6,207	3,393	1,132	7,852	4,075	1,456	2,610	3,972	1,445	7,608	3,388	1,217
Damietta ...	1,853	1,291	322	1,833	977	276	2,365	971	348	7,723	3,612	1,372	5,546	3,255	1,166
Suez ...	3,544	2,982	895	4,756	4,118	1,251	5,112	4,439	1,447	5,635	1,270	481	2,589	1,001	353
Frontiers ...	3,829	2,756	631	4,252	2,783	738	5,232	2,796	716	5,990	2,757	779	6,411	3,075	995
Behera... ..	40,592	28,479	4,898	41,465	26,182	4,507	44,383	26,396	4,728	50,709	28,886	5,300	49,091	24,751	4,753
Dakahlia ...	54,703	45,622	9,357	55,825	41,245	8,242	60,961	35,227	8,644	65,092	43,323	10,333	63,688	37,103	8,625
Gharbia ...	83,155	63,456	12,139	85,688	60,778	11,703	91,008	54,444	11,753	96,485	65,376	13,254	98,428	56,573	11,797
Matrouh ...	48,233	40,580	9,389	50,660	37,976	8,375	49,801	38,515	8,513	52,051	39,751	8,512	50,115	38,966	7,885
Kaliubia ...	27,391	21,929	4,902	29,800	19,589	4,813	29,331	19,785	4,759	32,324	21,199	5,023	31,974	20,980	4,690
Sharkia ...	48,171	32,308	6,536	49,810	31,498	6,288	50,957	32,430	5,641	53,844	35,354	6,715	53,377	32,647	6,406
Aswan ...	9,915	10,963	1,558	6,456	14,943	1,386	5,696	9,243	769	12,461	6,054	1,272	10,635	5,225	1,173
Assiut ...	49,279	36,790	8,164	47,866	33,789	7,098	48,916	32,957	6,814	53,322	41,841	7,455	52,048	35,562	6,753
Beni-Suef ...	21,282	14,144	3,070	22,175	14,000	3,070	22,402	13,112	2,807	22,069	17,436	3,128	24,071	13,698	2,586
Fayoum ...	25,955	18,405	5,097	26,041	18,132	4,926	26,227	19,787	5,021	27,582	19,465	5,156	25,930	18,926	4,326
Garga ...	42,963	28,445	5,255	41,319	27,901	4,690	42,667	23,556	3,918	44,217	24,560	3,946	41,809	25,952	3,900
Giza ...	32,277	25,353	6,327	34,145	24,230	5,882	35,793	22,766	6,012	38,838	24,827	6,312	36,274	27,016	6,368
Minia ...	36,697	25,484	6,207	38,104	25,944	6,269	39,394	26,636	6,619	42,202	36,006	7,193	36,519	26,938	4,847
Qena ...	30,459	18,668	3,357	30,630	24,377	2,914	24,399	26,395	2,551	36,501	16,847	2,819	33,778	18,025	3,041
TOTAL ...	658,324	494,358	110,847	689,771	492,644	110,520	722,166	472,234	110,020	787,502	512,003	120,366	774,152	469,382	101,023

TABLE No. 6.—BIRTHS, DEATHS AND INFANT MORTALITY BY GOVERNORATES AND PROVINCES (contd.)

Localities	1947			1948			1949			1950			1951		
	B.	D.	In. M.	B.	D.	In. M.	B.	D.	In. M.	B.	D.	In. M.	B.	D.	In. M.
Cairo ...	99,866	44,196	17,213	100,005	52,672	19,940	104,047	50,338	19,099	113,028	49,154	20,404	117,120	51,089	20,312
Alexandria ...	46,231	22,380	8,860	48,374	20,436	8,472	49,187	22,849	9,061	53,170	21,829	9,267	55,708	22,356	9,378
Ismailia ...	5,119	2,597	771	5,701	2,584	914	7,285	3,068	1,083	8,329	3,000	1,088	8,069	2,952	1,164
Port Said ...	8,594	3,165	110	8,070	3,513	1,116	8,952	3,416	1,195	8,806	3,789	1,403	9,251	3,463	1,220
Suez ...	5,757	2,624	1,023	2,803	991	305	2,714	1,057	373	2,975	1,026	398	2,879	1,037	349
Damietta ...	3,798	1,103	367	6,183	3,054	1,156	6,493	3,139	1,155	7,622	3,079	1,347	7,693	3,306	1,415
Frontiers Districts ...	7,177	2,675	855	6,800	2,733	927	7,496	2,730	915	7,475	2,524	921	7,968	3,399	1,120
Behera... ..	49,796	25,861	5,516	50,776	21,285	4,955	50,146	21,931	4,937	54,750	20,362	4,922	59,069	20,829	5,119
Dakahlia ...	67,008	38,385	2,858	69,363	31,981	9,421	68,767	33,666	9,023	73,928	29,766	8,485	77,167	30,764	8,451
Gharbia ...	102,185	57,732	11,070	107,125	46,709	13,116	108,265	48,951	12,286	33,880	10,910	2,613	33,086	10,985	2,508
Fouadia ...	—	—	—	—	—	—	—	—	—	84,491	33,497	9,263	87,656	34,981	9,519
Menoufia ...	55,843	32,727	7,926	56,025	31,605	9,216	54,988	34,444	9,021	60,102	29,216	8,294	60,936	30,898	8,747
Kaliubia ...	34,093	17,475	4,526	34,919	19,467	5,808	33,796	18,239	5,112	37,513	17,031	5,095	38,169	18,619	5,339
Sharkia ...	52,557	32,073	6,070	56,424	28,320	3,016	54,417	28,215	6,657	60,419	24,293	6,129	63,135	24,797	6,087
Aswan ...	11,343	5,188	1,255	17,034	5,012	1,246	15,913	5,074	1,243	11,954	5,844	1,461	12,211	5,823	1,620
Assiut ...	55,386	25,426	6,557	53,562	26,343	6,098	52,981	28,193	6,461	56,471	28,029	7,079	57,952	29,426	7,647
Beni Suef ...	26,010	11,465	2,607	24,780	11,329	2,746	24,218	12,311	3,015	26,422	10,937	2,903	27,548	11,737	3,335
Fayoum ...	31,665	14,975	4,388	27,994	16,425	16,425	4,255	28,914	17,003	32,120	16,690	5,176	32,944	16,424	5,117
Gerga ...	46,602	16,975	3,397	43,335	18,008	3,439	40,716	19,336	3,127	45,725	20,645	4,599	45,330	22,143	4,925
Giza ...	43,682	19,799	5,943	41,165	21,180	6,465	38,888	21,256	5,763	44,982	21,225	6,865	45,774	22,691	7,537
Minia ...	47,085	18,921	5,332	44,530	20,897	5,696	44,284	21,748	5,769	46,740	22,708	6,225	49,237	20,879	5,655
Qena ...	35,760	12,830	2,782	34,060	13,432	3,115	33,049	13,525	2,710	34,039	13,390	3,347	34,557	13,560	3,590
TOTAL ...	834,557	408,577	105,821	832,728	397,976	115,422	836,516	410,524	112,641	904,941	388,944	117,283	933,959	402,158	120,154

TABLE No. 7.—BIRTH-RATES, DEATH-RATES AND INFANTILE

Localities	1942			1943			1944			1945			1946		
	Birth	Death	Inf. Mort.	Birth	Death	Inf. Mort.	Birth	Death	Inf. Mort.	Birth	Death	Inf. Mort.	Birth	Death	Inf. Mort.
GOVTES.															
Cairo	46·3	36·9	247	53·1	37·7	237	58·9	36·8	215	60·5	33·8	207	61·9	34·3	20
Alexandria ...	34·4	25·2	204	44·4	32·7	250	52·7	29·7	217	55·5	34·7	242	66·6	25·9	18
Ismailia ...	44·7	38·5	214	61·4	41·1	188	70·9	43·9	184	73·7	37·9	168	71·2	35·0	16
Port-Said ...	38·3	26·5	183	44·9	24·6	182	53·8	28·9	192	53·4	27·5	187	51·1	22·7	15
Damietta ...	41·1	28·8	174	40·1	21·4	151	50·8	20·9	147	54·3	26·4	184	52·1	20·2	13
Suez	66·1	58·1	288	84·9	73·5	263	90·6	78·7	243	97·6	63·4	244	92·4	54·2	21
TOTAL ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
FRONTIER DIST. ...	32·2	23·3	165	35·3	23·2	174	43·2	22·8	135	48·0	22·1	130	50·0	23·9	15
L. EGYPT															
Behera... ..	30·7	25·0	121	35·9	22·7	109	37·9	22·5	107	42·6	24·2	105	40·6	21·3	9
Dakahlia ...	41·3	34·5	171	41·8	31·9	148	45·0	26·0	142	47·1	31·3	159	45·5	26·5	13
Fouadia ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Gharbia ...	39·1	32·9	146	39·7	28·2	137	41·6	24·9	129	43·4	29·4	137	43·7	25·1	11
Menoufia ...	38·9	29·7	195	40·6	30·4	165	39·6	30·6	171	40·9	31·2	164	39·2	30·5	11
Kaliubia ...	41·8	33·5	119	44·8	29·5	162	43·6	29·4	162	47·7	30·4	100	46·1	30·3	11
Sharkia ...	40·1	27·3	136	40·9	25·8	126	41·2	26·2	111	42·8	28·1	125	42·0	25·7	11
TOTAL ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
U. EGYPT															
Aswan	30·8	34·1	157	20·3	47·1	215	18·6	30·1	143	40·0	19·5	102	33·7	16·5	11
Assiut	37·7	28·1	166	36·2	25·6	148	36·6	24·7	139	39·4	30·9	140	38·3	26·2	11
Beni Suef ...	34·9	23·2	144	35·9	22·7	138	35·8	20·9	125	34·8	27·5	142	37·7	41·4	11
Fayoum	40·5	28·7	196	40·1	27·9	189	40·0	30·1	191	41·5	29·3	187	38·8	28·3	11
Gerga	34·8	23·0	122	33·1	22·3	114	33·7	18·6	93	34·3	19·1	89	32·1	19·9	11
Giza	42·6	33·5	196	44·5	31·6	172	46·1	29·2	168	48·9	31·3	163	45·2	33·7	11
Minia	36·6	25·4	169	37·6	25·6	165	38·3	25·9	157	40·6	34·6	170	35·2	25·9	11
Qena	27·6	16·9	110	27·5	21·9	95	22·0	23·8	105	32·5	14·8	77	29·7	15·8	11
TOTAL ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
GRAND TOTAL	38·2	28·7	167	39·6	28·3	160	41·0	26·8	152	43·9	28·6	153	42·6	25·8	11

ITY RATES BY GOVERNORATES AND PROVINCES 1942—1951.

1947		1948			1949			1950			1951		
Death	Inf. Mort.	Birth	Death	Inf. Mort.	Birth	Death	Inf. Mort.	Birth	Death	Inf. Mort.	Birth	Death	Inf. Mort.
21·0	172	46·8	24·7	199	47·8	23·1	184	50·5	22·0	181	51·0	22·3	173
24·1	192	50·7	21·4	175	50·2	23·3	184	52·9	21·7	174	53·8	21·6	168
38·0	151	50·9	23·1	160	63·5	26·7	149	59·5	21·4	131	55·5	20·3	144
17·7	129	43·1	19·1	138	47·4	18·1	133	45·0	19·4	159	46·2	17·3	132
20·5	131	50·3	17·8	109	47·3	18·4	137	50·2	17·3	134	47·1	17·0	121
24·2	178	55·1	27·2	187	56·4	27·3	178	64·4	26·0	177	62·8	27·0	184
—	—	—	—	—	—	—	—	51·6	23·5	175	52·0	21·8	169
15·9	119	39·3	15·8	136	42·3	15·4	122	42·6	14·4	123	44·2	18·9	141
20·8	111	39·7	16·6	98	38·3	16·8	98	40·9	15·2	90	43·1	15·2	87
27·1	123	47·7	22·0	136	46·2	22·6	131	48·4	19·5	115	49·1	19·6	110
—	—	—	—	—	—	—	—	41·9	13·5	77	39·8	13·2	76
24·7	108	44·6	19·5	122	44·1	19·9	113	49·5	19·6	110	50·0	20·0	109
28·0	142	46·7	26·4	164	45·1	28·3	164	48·3	23·5	138	48·0	17·6	144
25·4	133	48·9	27·3	166	46·5	25·1	151	50·3	22·7	136	49·8	24·0	140
23·6	115	41·9	21·0	124	40·4	20·6	120	44·1	17·7	101	44·9	17·6	96
—	—	—	—	—	—	—	—	46·3	18·9	111	46·7	19·2	109
18·1	111	36·1	16·9	116	52·1	16·6	78	38·7	18·9	122	38·8	18·6	133
18·4	118	38·0	18·7	113	37·0	19·7	122	38·6	19·2	125	38·9	19·8	132
18·6	100	39·4	18·0	111	37·7	19·2	124	40·3	16·7	110	41·1	17·5	121
22·2	139	40·6	23·8	152	41·3	24·3	160	45·0	23·4	161	45·3	22·6	155
13·1	73	32·7	13·6	79	30·2	14·4	77	33·5	15·1	101	32·7	16·0	109
24·1	136	46·8	24·1	157	43·4	23·7	148	49·1	23·2	153	48·9	24·3	165
17·8	113	41·4	19·4	128	40·3	19·8	130	41·6	20·2	133	41·7	18·2	114
11·5	78	30·1	11·9	91	28·7	11·8	82	29·0	11·4	98	29·0	11·4	104
—	—	—	—	—	—	—	—	38·7	18·1	126	38·9	18·1	129
21·3	127	42·5	20·3	139	41·9	20·6	135	44·4	19·1	130	44·7	19·3	129

TABLE No. 8.—BIRTHS, DEATHS, AND INFANT MORTALITY AND RATES
BY GOVERNORATES AND PROVINCES, EGYPT 1951.

Localities	Births	Birth Rate Per 1000 Pop.	Deaths	Death Rate Per 1000 Pop.	Infantile Mortality	Inf. Mortali- ty Rate per 1000 Births
GOVERNORATES :						
Cairo	117,120	51·0	51,089	22·3	20,312	173
Alexandria	55,708	53·8	22,356	21·6	9,378	168
Ismailia	8,069	55·5	2,952	20·3	1,164	144
Port Said	9,251	46·2	3,463	17·3	1,220	132
Damietta	2,879	47·1	1,037	17·0	349	121
Suez	7,693	62·8	3,306	27·0	1,415	184
TOTAL	200,720	52·0	84,203	21·8	33,838	169
Frontier Districts	7,968	44·2	3,399	18·9	1,120	141
LOWER EGYPT :						
Behera	59,069	43·1	20,829	15·3	5,119	87
Dakahlia	77,167	49·1	30,764	19·6	8,451	110
Fouadia	33,086	39·8	10,985	13·2	2,508	76
Gharbia	87,656	50·0	34,981	20·0	9,519	109
Menoufia	60,936	48·0	30,898	17·6	6,747	144
Kaliubia	38,169	49·8	18,619	24·3	6,339	140
Sharkia	63,135	44·9	24,797	17·6	6,087	96
TOTAL	419,218	46·7	171,873	19·2	45,770	133
UPPER EGYPT :						
Aswan	12,211	38·8	5,823	18·5	1,620	133
Assiut	57,952	38·9	29,426	19·8	7,647	132
Beni Suef	27,548	41·1	11,737	17·5	3,335	121
Fayoum	32,944	45·3	16,424	22·6	5,117	155
Gerga	45,330	32·7	22,143	16·0	4,925	109
Giza	45,774	48·9	22,691	24·3	7,537	165
Minia	49,737	41·7	20,897	18·2	5,655	114
Qena	34,557	29·0	13,560	11·4	3,590	104
TOTAL	306,053	38·9	142,683	18·1	39,426	129
GRAND TOTAL	933,959	44·7	402,158	19·3	120,154	129

**TABLE NO. 9.—AGE AND SEX DISTRIBUTION OF DEATHS AND RATES
PER 1000 POPULATION, 1951.**

Age Groups	Males	Specific rate per 1000	Females	Specific rate per 1000	TOTAL	Specific rate per 1000
0-1 Year	63,711	224.5	56,443	205.3	120,154	215.1
1-5 Years	61,468	54.7	58,484	50.4	119,952	52.5
5-10 „	5,420	4.1	4,092	3.1	9,512	3.6
10-15 „	3,595	2.9	2,322	2.0	5,917	2.4
15-20 „	3,229	3.0	1,999	2.0	5,228	2.5
20-25 „	3,217	4.3	2,012	2.6	5,229	3.4
25-30 „	3,576	4.7	2,825	3.3	6,401	4.0
30-35 „	3,846	5.6	3,277	4.3	7,123	4.9
35-40 „	4,484	6.2	3,091	4.3	7,575	5.2
40-45 „	4,770	7.6	3,287	5.3	8,057	6.4
45-50 „	4,169	8.8	2,316	5.1	6,485	7.0
50-55 „	6,602	14.2	4,112	8.3	10,714	11.2
55-60 „	3,328	17.7	1,586	8.3	4,914	13.0
60-65 „	6,805	24.5	4,427	13.5	11,232	18.5
65-70 „	4,451	48.2	2,873	31.8	7,324	40.1
70-75 „	7,765	65.5	6,176	41.0	13,941	51.8
75-80 „	3,691	143.1	2,860	108.3	6,551	125.5
80-85 „	6,832	178.4	7,798	134.7	14,630	152.1
85 and over	12,249	644.7	17,662	681.9	29,911	666.2
Not stated	769	27.9	539	14.7	1,308	20.4
TOTAL	213,977	20.7	188,181	17.9	402,158	19.3

TABLE No. 10.—INFANTILE MORTALITY BY CAUSE

Diseases of Infancy	Infantile deaths under one year									
	1942	1943	1944	1945	1946	1947	1948	1949	1950	
Measles	395	99	262	151	360	200	338	314	76	
Whooping Cough	28	43	32	28	13	18	11	21	22	
Diphtheria	68	81	59	85	59	57	67	55	39	
Tuberculous diseases	13	19	24	11	23	14	18	20	20	
Syphilis	150	234	165	130	135	121	147	131	154	
Rickets and Osteomalacia... ..	189	183	180	176	128	132	221	166	145	
Convulsions	198	200	252	213	134	98	80	70	—	
Bronchitis	3,636	3,522	3,705	4,211	3,742	3,947	5,574	4,768	4758	
Broncho-Pneumonia	936	1,036	1,095	959	1,145	950	874	1,095	1185	
Pneumonia	277	301	347	393	497	538	806	621	780	
x Diarrhoea and Enteritis	31,099	33,230	36,647	37,173	34,086	33,030	32,460	35,083	37,593	37,593
Congenital Defects	81	78	137	199	150	91	164	64	122	
Congenital Debility	14,773	16,895	17,881	20,318	18,786	18,191	21,344	20,902	22,779	22,779
Premature Birth	168	195	151	138	167	123	152	168	236	
Consequences of Delivery	47	80	74	113	132	138	115	140	207	
Infanticide	161	126	119	86	100	72	82	60	80	
Accidents	109	96	122	113	88	109	59	100	83	
Other Causes	1,585	1,841	1,983	1,909	1,475	1,553	1,205	1,137	1,177	1,177
TOTAL	53,913	58,259	60,235	66,396	61,220	59,380	63,516	64,914	69,446	70,623

LOCALITIES HAVING HEALTH OFFICES, 1942—1951

Infantile Mortality rates per 100 live births.

	1943	1944	1945	1946	1947	1948	1949	1950	1951
6	0·365	0·877	0·468	1·1	0·566	0·933	0·845	0·2	1·0
115	0·159	0·107	0·087	0·04	0·051	0·03	0·057	0·1	0·1
279	0·299	0·198	0·264	0·180	0·161	0·185	0·148	0·1	0·1
53	0·070	0·080	0·034	0·070	0·04	0·05	0·054	0·05	0·1
316	0·664	0·652	0·453	0·413	0·343	0·406	0·353	0·4	0·4
778	0·675	0·603	0·546	0·391	0·374	0·610	0·444	0·4	0·0
313	0·738	0·844	0·680	0·410	0·277	0·221	0·188	—	—
9	13·0	12·4	13·1	11·4	11·2	16·4	12·8	11·7	13·7 ✓
3	3·8	3·7	3·0	3·5	2·7	2·4	2·9	2·9	4·3
3	1·1	1·2	1·2	1·5	1·5	1·7	1·7	1·9	2·6
3	122·7	112·6	115·2	104·2	93·8	89·6	94·4	92·5	88·4 ✓
332	·288	·459	·617	·458	0·258	·453	0·172	0·3	0·2
3	62·4	59·6	63·0	57·4	61·5	58·9	56·3	56·1	49·0
390	·720	·505	·397	·510	·348	·420	0·452	0·6	1·1
192	·295	·248	·350	·408	·391	·318	0·377	0·5	1·0
661	·465	·398	·267	·306	·204	·236	0·161	0·2	0·1
447	·354	·408	·350	·269	·309	·163	0·269	0·2	0·2
5	6·8	6·6	5·9	4·5	4·4	3·3	3·1	0·9	3·6
3	215·1	201·6	205·8	187·1	168·1	175·1	174·7	170·9	166·4

TABLE NO. 11.—INFANTILE MORTALITY BY AGE AND

Diseases of Infancy	Days									
	0-1	1	2	3	4	5	6	7	14	21
Measles	—	1	—	—	—	—	—	1	1	—
Whooping Cough	—	—	—	—	—	—	—	—	—	—
Diphtheria	—	—	—	—	—	—	—	—	—	—
Tuberculous diseases	—	—	—	—	—	—	—	—	—	—
Syphilis	8	12	8	9	6	6	6	16	11	5
Rickets and Osteomalacia	—	1	—	2	—	—	—	1	—	—
Convulsions	—	—	—	—	1	—	—	—	—	—
Bronchitis	—	1	7	5	10	9	8	86	66	46
Broncho-Pneumonia	—	2	1	6	8	3	5	37	24	7
Pneumonia	3	13	12	17	8	14	5	37	22	13
Diarrhoea and Enteritis	7	39	41	58	62	53	75	323	346	208
Congenital Defects	12	11	6	9	9	5	4	9	9	1
Congenital Debility	517	1,160	798	938	711	736	623	2,953	1,857	882
Pemature Birth	59	68	40	33	25	19	14	72	23	14
Consequences of Delivery	114	94	68	32	20	15	10	21	11	5
Infanticide	23	8	—	—	—	—	—	—	1	—
Accidents	4	2	2	2	1	—	1	1	1	—
Other Causes	26	32	36	30	19	25	23	91	59	24
TOTAL	773	1,444	1,019	1,141	880	885	774	3,648	2,431	1,204

LOCALITIES HAVING HEALTH OFFICES, 1951

Months										TOTAL
2	3	4	5	6	7	8	9	10	11	
5	7	27	20	47	56	83	64	76	48	443
2	2	1	1	3	3	7	1	1	4	26
2	2	3	1	4	11	11	4	9	3	51
1	2	3	1	7	5	6	3	5	3	37
6	8	6	9	10	5	10	11	3	1	165
5	11	16	14	23	14	36	23	12	11	175
—	—	—	—	—	—	—	—	—	—	1
432	500	579	525	690	510	637	499	514	318	5943
117	133	140	143	219	182	226	163	188	125	1829
64	87	86	92	118	115	120	89	92	49	1121
2,882	3,731	4,002	3,765	4,345	3,542	4,145	3,107	2,933	1,888	37,594
3	6	—	2	—	2	—	1	1	—	97
2,187	1,511	935	573	477	119	340	213	208	99	20,813
21	6	2	2	3	9	—	1	—	1	453
8	3	2	1	4	3	2	14	—	—	443
—	—	—	—	2	—	—	—	—	—	34
9	5	7	6	13	7	14	11	5	4	99
122	92	101	100	141	104	155	95	85	49	1,518
5,836	6,106	5,900	5,255	6,106	4,887	5,792	4,299	4,132	2,603	70,742

TABLE NO. 12.—STILL BIRTHS AND RATES PER 1000 LIVE BIRTHS BY SEX, 1951

LOCALITIES	Still Births			Still Birth-rate Per 1000 Live Births		
	Males	Females	TOTAL	Males	Females	TOTAL
GOVERNORATES						
Cairo	1,129	844	1,973	18.3	14.7	16.6
Alexandria	656	431	1,090	22.6	15.6	19.2
Canal	168	127	295	18.3	15.0	16.7
Damietta	49	32	81	32.3	22.1	27.4
Suez	90	60	150	22.6	15.6	1.9
TOTAL	2,095	1,494	3,589	19.9	15.1	17.6
FRONTIER DISTRICTS	32	31	63	7.8	7.9	7.8
LOWER EGYPT						
Behera	96	60	156	3.2	2.0	2.6
Dakahlia	333	230	563	8.3	6.1	7.7
Fouadia	101	64	165	5.8	4.1	4.9
Gharbia	287	197	484	6.4	4.6	5.5
Menoufia	216	152	368	6.8	5.1	6.0
Kaliubia	145	102	247	7.3	5.5	6.4
Sharkia	217	124	341	6.6	4.1	5.4
TOTAL	1,395	929	2,324	6.4	4.5	5.5
UPPER EGYPT						
Aswan	35	19	54	5.4	3.3	4.4
Assiut	137	89	226	4.4	3.3	3.9
Beni Suef	116	75	191	7.8	5.8	6.9
Fayoum	103	80	183	5.9	5.1	5.5
Gerga	124	81	205	4.8	4.1	4.5
Giza	163	113	276	6.8	5.3	6.0
Minia	131	84	215	5.1	3.5	4.3
Qena	47	45	92	2.4	3.0	2.7
TOTAL	856	586	1,442	5.2	4.1	4.7
GENERAL TOTAL	4,378	3,040	7,418	8.9	6.8	7.9

Chapter II — Infectious Diseases

A total of 55,674 cases of infectious diseases of Schedule I with 14,990 deaths were reported throughout Egypt during the year, or a case rate of 267 and a death rate of 72 per 100,000 of population as against 50,654 cases and 11,749 deaths and a case rate of 248 and a death rate of 58 per 100,000 of population reported during the previous year.

The two outstanding features of the incidence of infectious diseases this year were :

(a) A decline of the epidemic wave of cerebro spinal fever which broke out the previous year.

(b) A marked increase in the incidence of measles. Whereas the case rate was 15 per 100,000 in 1950, it reached 51.5 during this year.

The following is a detailed study of the more important diseases :

Cerebro Spinal Fever :

This disease had spread in an epidemic form during the previous year. According to experience during the previous two epidemics which had broken out during the intervals 1913–1916 and 1931–1934, the number of cases occurring during this year (1951) should have been more than five times their number in 1950, as happened during the first epidemic, or at least twice their number as in the case of the second epidemic. In the Sudan, the cases reported during 1951 were about nine times their number in the previous year. In Egypt, the number of reported cases dropped to less than half their number in 1950. Perhaps it would be interesting to find out the effect of the following two factors on the course of the epidemic :

(1) Relative humidity.

(2) Dispensing sulpha compounds for prophylaxis before the fall of the 1951 epidemic season.

1.—*Relative humidity :*

It was presumed that the relative humidity was converse with the incidence of cerebro spinal fever. Investigation of the relation between humidity and number of cases in Cairo, Alexandria and Minia during the present epidemic did not, however, establish any such relationship. It is assumed that the use of sulpha compounds by the public in addition to the quantities dispensed for prophylaxis may have something to do with the disappearance of this relationship. One may safely eliminate changes and humidity as factors affecting the decline of cases during the second year of the epidemic.

2.—*Dispensing Sulpha Compounds for prophylaxis before the fall of the 1951 epidemic season :* (Please refer to last year's report).

It was mentioned in last year's report that sulpha tablets were dispensed during the last quarter of 1950 to contacts of cases occurring during the epidemic season as well as to congregations. It is suggested that this was the principal cause for the fewer cases during 1951 than in the previous year which marked the onset of the epidemic. As evidence, no cases were reported during 1951 among school pupils in Upper Egypt where cases were reported during 1950 and where sulpha compounds were dispensed as prophylaxis.

Measles :

A total of 10,756 cases of measles with 2,915 deaths were reported during the year or a case rate of 51.5 and a death rate of 14 per 100,000 of population, and a case fatality rate of 27% as compared with 3,068 cases with 598 deaths in the previous year or a case rate of 15, and a death rate of 2.9 per 100,000 of population and a case fatality rate of 19.5%. The higher incidence this year may be explained by the biennial outburst of measles which sometimes lasts for two consecutive years.

It is believed that complications of measles account for the greater part of child deaths ; so that if notification of measles could be made more accurate and the cases detected and treated early, perhaps a material decrease in child deaths would be realized.

Plague :

No cases of plague have been reported since 1948.

Small-Pox :

Two cases without deaths were reported this year in Cairo. Both were residents of Cairo but the source of infection was unknown. Both cases were diagnosed clinically.

Typhus :

92 cases of typhus with 9 deaths were reported during the year or a case-rate of 0.4 and a death-rate of 0.04 per 100,000 of population and a case fatality rate of 9.8% as compared with 105 cases with 16 deaths in the previous year, or a case-rate of 0.5 and a death rate of 0.08 and a case fatality rate of 15%. This shows that the incidence of typhus is on the decline. Tables 14, 15, 16 and 17 give the number of cases and deaths and their ratios per 100,000 of population for 1950 and 1951 distributed according to governorates and provinces. These show that about 80% of the cases occurred in Cairo governorate and Menoufia, Behera and Beni Suef provinces.

Typhoid and Paratyphoid :

A total of 6,794 cases with 662 deaths were reported during the year, or a case rate of 32.6 and a death-rate of 3.2 per 100,000 of population and a case fatality rate of 9.7% as against 7,886 cases with 836 deaths reported during the previous year and a case rate of 38.7 and a death rate of 4.1 per 100,000 of population and a case fatality rate of 10.6%.

TABLE NO. 13.—CASES AND DEATHS OF INFECTIOUS DISEASES

Diseases		1942	1943	1944	1945	1946	1947	1948	1949	1950
Plague	C	15	163	644	218	211	15	00	00	00
	D	10	111	393	108	57	5	00	00	00
Typhus	C	22,045	40,183	18,477	18,283	1,458	173	325	180	105
	D	4,411	8,252	4,043	3,627	337	53	74	53	16
Small Pox	C	00	4,138	11,194	1,355	416	170	16	3	9
	D	00	384	1,016	115	50	18	4	1	00
Typhoid Fever	C	6,814	4,431	5,019	5,286	4,584	4,601	55,13	7,110	7,886
	D	1,257	790	790	833	637	685	814	814	836
Scarlet Fever... ..	C	39	54	30	12	11	10	9	18	24
	D	2	3	00	1	00	2	0	1	00
Cerebro Spinal Fever	C	212	114	147	65	88	94	133	205	2,521
	D	101	57	75	49	44	32	37	57	401
Diphtheria	C	3,950	4,143	3,326	3,130	2,047	1,809	1,835	1,683	1,389
	D	1,882	1,595	1,264	1,159	823	591	659	603	597
Measles	C	9,764	4,249	7,274	5,444	6,968	6,886	6,485	11,311	3,068
	D	3,654	1,022	2,475	1,413	1,826	1,336	2,408	2,603	598
Pulmonary T.B.	C	6,608	6,770	6,950	6,819	6,407	6,523	6,614	7,219	7,011
	D	3,472	3,647	3,803	3,681	3,671	3,581	3,718	3,812	4,114
Acute Pneumonia... ..	C	6,215	6,935	6,929	5,805	5,420	5,797	5,074	7,458	6,386
	D	5,296	5,762	5,242	4,848	4,432	3,948	3,561	4,898	4,383
Chicken Pox	C	870	1,238	1,057	1,338	873	1,755	1,722	1,611	2,043
	D	8	21	15	12	11	7	1	6	5
Puerperal Septicaemia... ..	C	332	375	375	387	266	310	296	291	320
	D	208	187	158	178	145	101	94	71	59
Dysentery	C	3,553	1,872	1,672	1,217	1,130	1,359	1,249	1,130	1,190
	D	577	604	537	384	329	245	228	208	203
Influenza	C	12,965	14,056	11,203	14,642	17,570	5,711	5,136	6,330	7,781
	D	218	219	204	152	67	42	38	86	71
Malaria New	C	0	0	37,847	5,887	9,262	6,747	4,445	2,817	4,251
	D	20,937	16,530	1,867	56	22	31	23	17	15
,, Recurrent	C	394	1,341	218231	141557	5,686	3,365	1,493	1,392	1,654
	D	0	0	14	19	4	1	1	0	0
Anthrax	C	21	15	13	4	6	9	2	1	3
	D	4	9	2	2	1	1	0	1	1
Whooping Cough	C	2,257	2,054	1,208	1,856	904	2,189	770	1,385	989
	D	142	105	105	92	54	63	27	74	55
Parotitis (Mumps)... ..	C	1,453	1,449	1,063	1,743	1,290	1,880	1,389	2,628	1,726
	D	30	31	30	27	13	9	8	7	0
Undulant Fever	C	9	6	20	15	22	14	28	78	82
	D	2	4	3	2	2	1	6	4	—
Leprosy	C	520	393	224	332	124	162	149	198	233
	D	82	68	58	53	55	51	61	69	49
Tetanus	C	452	442	544	439	435	443	414	418	472
	D	313	294	331	303	354	309	309	272	347
Acute Poliomyelitis	C	5	7	11	7	2	11	6	13	8
	D	1	2	4	6	6	14	8	9	1
Erysipelas	C	3,100	1,956	1,671	1,551	1,181	1,460	1,413	1,458	1,503
	D	312	209	156	146	88	91	75	64	52
Relapsing Fever	C	0	0	10	18,126	110405	229	6	0	0
	D	0	0	0	880	2,414	30	0	0	0

ES PER 100,000 POPULATION, 1942—1951.

1942	1943	1944	1945	1946	1947	1948	1949	1950	1951
0.08	0.09	3.7	1.2	1.2	0.08	0	0	0	0
0.06	0.64	2.2	0.6	0.3	0.03	0	0	0	0
28.0	230.6	104.8	102.0	8.5	0.9	1.3	0.9	0.5	0.4
25.6	47.4	22.9	20.2	1.9	0.3	0.4	0.3	0.1	0.04
0	23.8	63.5	7.6	2.2	0.9	0.1	0.02	0.04	0.01
0	2.2	5.8	0.6	0.3	0.1	0.02	0.01	0	0
39.6	25.4	28.5	29.5	25.3	24.0	28.3	35.6	38.7	32.6
7.3	4.5	4.5	4.5	3.1	3.6	4.1	4.1	4.1	3.2
0.3	0.3	0.2	0.1	0.1	0.1	0.04	0.1	0.1	0.8
0.01	0.02	0	0.01	0	0.01	0	0.01	0	0
1.2	0.7	0.8	0.4	0.5	0.5	0.7	1.0	12.4	5.8
0.6	0.3	0.4	0.3	0.2	0.2	0.8	0.3	3.0	1.2
22.9	23.8	18.9	17.5	11.2	9.5	9.4	8.4	6.8	6.9
10.9	9.2	7.2	6.5	4.5	3.1	3.1	3.4	2.9	2.9
56.7	24.4	41.3	30.4	38.4	36.0	33.2	56.7	15.0	51.5
21.2	5.9	14.0	7.9	9.5	7.0	12.3	13.0	2.9	14.5
18.4	38.9	39.4	38.1	35.3	34.0	33.8	36.2	34.4	37.1
20.2	20.9	21.6	20.5	20.2	18.7	19.0	19.1	20.2	17.7
36.0	39.8	39.3	12.4	29.9	30.2	25.9	37.4	30.3	27.6
30.7	33.1	29.7	27.0	24.4	20.6	18.2	24.6	21.5	28.1
5.1	7.1	6.0	7.5	4.8	9.2	8.8	8.1	10.0	10.4
0.05	0.1	0.1	0.1	0.1	0.04	0.01	0.01	0.02	04.4
1.9	2.2	2.0	2.2	1.5	1.6	1.5	1.5	1.6	1.8
1.2	1.1	0.9	1.0	0.8	0.7	0.5	0.4	0.3	0.4
20.6	10.7	9.5	6.8	6.2	7.1	6.4	5.7	5.8	5.0
3.3	3.5	3.0	2.1	1.8	1.3	1.2	1.0	1.0	1.0
5.3	80.7	63.6	81.7	96.8	29.8	26.3	31.7	38.2	41.2
1.3	1.3	1.2	1.8	0.4	0.2	0.2	0.4	0.3	0.4
21.5	94.9	214.7	32.9	51.1	35.2	22.7	14.1	20.8	12.4
2.3	7.7	10.6	0.3	0.1	0.2	0.1	0.1	0.1	0.1
0	0	1238.2	789.8	31.3	17.6	7.6	7.0	8.1	4.3
0	0	0.08	0.1	0.02	0.01	0	0	0	0
0.1	0.08	0.07	0.02	0.03	0.05	0.01	0.01	0.01	0.04
0.02	0.05	0.01	0.01	0.06	0.01	0	0.01	0.01	0.01
13.1	11.8	6.9	10.4	5.0	11.4	3.9	6.9	4.8	5.8
0.8	0.6	0.6	0.5	0.3	0.3	0.1	0.4	0.3	0.3
8.4	8.3	6.0	9.7	7.1	9.8	7.1	13.2	8.5	11.2
0.2	0.2	0.1	0.1	0.07	0.05	0.04	0.04	0	0.01
0.05	0.03	0.1	0.08	0.1	0.06	0.1	0.4	0.4	0.4
0.01	0.02	0.02	0.01	0.01	0.01	0.03	0.02	0	0.01
3.0	2.3	1.3	1.9	0.7	0.8	0.8	1.0	1.1	0.9
0.5	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.5
2.7	2.5	3.1	2.5	2.4	2.3	2.1	2.1	2.3	2.7
1.8	1.7	1.9	1.7	2.5	1.6	1.6	1.4	1.7	1.9
0.03	0.04	0.06	0.04	0.01	0.06	0.03	0.07	0.04	0.09
0.11	0.01	0.03	0.03	0.03	0.07	0.14	0.05	0.01	0.06
18.5	11.2	9.5	8.7	6.5	7.6	7.2	7.3	7.4	8.0
1.8	1.2	0.9	0.8	0.5	0.5	0.4	0.3	0.3	0.2
0	0	0.06	5.6	6.1	1.2	0.03	0	0	0
0	0	0	4.9	1.3	0.2	0	0	0	0

TABLE No. 14.—INFECTIOUS DISEASES

Localities	Typhus		Small pox		Typhoid		Scarlet F.		Cerebro Spinal fever	
	50	51	50	51	50	51	50	51	50	51
Cairo	32	33	1	2	3,902	3,368	10	45	1,307	2
Alexandria	6	1	—	—	734	861	3	104	403	4
Ismailia	—	—	—	—	42	35	—	3	19	—
Port Said	—	—	—	—	1,062	554	9	11	74	—
Damietta	3	—	—	—	44	51	—	—	7	—
Suez... ..	—	—	5	—	146	163	—	—	42	—
Frontier Districts	11	1	1	—	16	34	—	—	7	—
Behera	4	12	—	—	227	187	—	—	62	—
Dakahlia	27	5	1	—	197	139	—	—	50	—
Fouadia	—	—	—	—	19	27	—	—	5	—
Gharbia	6	—	—	—	248	234	—	—	148	—
Menoufia... ..	2	20	—	—	81	66	—	—	22	—
Kaliubia	5	2	—	—	173	175	—	—	45	—
Sharkia	5	—	—	—	98	85	—	—	76	—
Aswan	—	—	—	—	12	36	—	—	10	—
Assiut	2	1	1	—	168	154	1	—	70	—
Beni Suef	—	8	—	—	34	48	—	—	7	—
Fayoum	—	—	—	—	95	60	—	—	4	—
Gerga	—	2	—	—	120	116	—	—	42	—
Giza... ..	2	6	—	—	258	277	1	—	99	—
Minia	—	—	—	—	66	62	—	1	16	—
Qena... ..	—	1	—	—	44	62	—	—	6	—
TOTAL	105	92	9	2	7,886	6,794	24	165	2,521	1,2

es, 1950—1951

Diphtheria		Measles		Pulmonary Tuberculosis		Acute Pneumonia		Chicken Pox		Puerperal Sep.		Dysentery	
	51	50	51	50	51	50	51	50	51	50	51	50	51
38	554	586	2,248	3,564	2,567	2,163	2,845	731	776	145	186	179	222
57	269	1,180	2,971	1,180	902	2,979	3,561	571	560	102	82	261	170
13	3	1	6	3	17	30	27	2	15	—	1	2	2
42	26	85	111	161	179	288	281	196	134	2	3	32	31
3	3	—	1	23	5	17	8	5	26	—	—	—	—
20	20	8	39	63	69	125	128	58	48	6	12	67	18
3	14	99	1,683	18	19	19	19	37	43	2	—	52	88
37	37	60	230	107	115	54	83	69	123	1	4	7	14
33	74	28	186	297	304	46	44	19	34	9	5	21	3
11	3	9	27	66	66	17	18	15	16	—	2	29	17
08	125	62	229	289	207	114	111	86	85	3	6	25	11
33	20	171	652	128	81	25	27	19	29	10	13	12	5
59	57	11	280	165	116	81	92	34	8	3	6	15	7
54	42	17	172	170	60	22	15	58	33	1	6	63	78
3	8	—	8	109	83	8	5	3	9	1	—	7	—
51	38	32	264	143	184	98	76	12	25	10	7	48	3
14	14	29	54	91	105	8	69	13	19	2	4	6	5
22	22	62	170	130	150	33	52	19	42	3	1	80	20
12	23	87	442	113	99	59	43	12	13	3	2	19	15
42	59	32	629	104	132	122	213	71	100	7	17	5	15
26	25	379	226	53	64	34	61	11	28	3	6	210	279
8	5	130	128	134	137	44	56	2	1	7	7	50	37
39	1,441	3,068	10,756	7,011	5,661	6,386	7,840	2,043	2,167	320	370	1,190	1,040

TABLE NO. 14.—INFECTIOUS DISE.

Localities	Influenza		Malaria New		Malaria Recurrent		Anthrax		Whooping Cough	
	50	51	50	51	50	51	50	51	50	51
Cairo	6,782	2,896	509	341	8	6	—	—	136	—
Alexandria	2,175	2,928	91	116	—	—	—	—	267	—
Ismailia	35	52	56	15	—	—	—	—	3	—
Port Said	677	436	77	32	—	—	—	—	5	—
Damietta	41	41	14	2	—	—	—	—	—	—
Suez... ..	66	60	12	7	5	4	—	—	12	—
Frontier Districts	20	19	153	320	—	33	—	—	—	—
Behera	133	296	188	324	7	40	—	—	21	—
Fouadia	172	137	271	95	7	19	—	—	3	—
Dakahlia	62	11	182	37	1,291	478	—	—	—	—
Gharbia	281	293	129	116	—	—	2	5	35	—
Menoufia	114	146	26	21	84	69	1	—	29	—
Kaliubia	233	272	418	105	33	38	—	—	6	—
Sharkia	86	30	925	598	40	127	—	—	20	—
Aswan	39	69	—	—	—	1	—	—	7	—
Assiut	237	196	72	12	1	—	—	—	27	—
Beni Suef	57	96	239	71	1	5	—	—	—	—
Fayoum	28	44	60	88	154	38	—	—	94	—
Gerga	67	70	12	2	—	2	—	—	5	—
Giza	233	259	254	53	1	—	—	—	247	—
Minia	146	93	515	232	5	1	—	—	27	—
Qena	113	152	48	11	16	43	—	4	45	—
TOTAL	7,781	8,596	4,251	2,598	1,654	904	3	9	989	1

1950—1951 (contd.)

rotitis	Undulant fever		Leprosy		Tetanus		Acute Poliomyelitis		Erysipelas		
	51	50	51	50	51	50	51	50	51	50	51
4	904	58	55	4	1	61	84	1	6	301	451
3	523	1	2	2	—	47	70	3	4	622	595
3	4	—	—	—	—	2	9	—	—	3	2
0	15	—	—	1	—	12	6	—	—	89	77
5	—	—	—	—	1	3	—	—	—	11	2
6	61	—	—	2	—	2	1	—	—	14	10
5	73	—	—	1	—	—	1	—	—	7	6
9	183	2	—	—	1	53	51	—	3	46	53
8	19	3	—	17	19	21	30	—	—	78	57
1	41	1	—	2	1	17	22	—	—	25	14
2	144	4	1	3	3	44	41	2	1	74	102
8	107	1	—	21	39	52	46	—	—	32	61
9	21	1	6	3	6	18	20	—	—	35	54
8	49	—	1	7	16	22	18	2	1	46	41
3	2	—	—	2	9	1	4	—	—	2	4
0	20	—	—	14	9	38	45	—	2	16	11
1	23	—	—	103	17	9	7	—	—	14	21
1	14	1	4	6	4	8	11	—	1	16	18
4	14	—	—	9	27	13	14	—	—	10	5
0	78	8	5	8	8	14	33	—	—	18	45
2	10	2	—	16	14	22	28	—	—	38	35
4	5	—	—	12	3	13	15	—	—	6	11
5	2,330	82	74	233	178	472	556	8	18	1,503	1,675

TABLE No. 15. — INFECTIOUS DISEASES O

Localities	Typhus		Small-Pox		Typhoid fever		Scarlet fever		Cerebro Sp fever	
	50	51	50	51	50	51	50	51	50	51
Cairo	1.4	1.4	0.04	0.09	174.5	146.7	0.4	2.0	58.4	
Alexandria	0.6	1.1	—	—	73.0	83.2	0.3	10.0	40.0	
Ismailia	—	—	—	—	30.0	24.1	—	2.1	13.6	
Port Said	—	—	—	—	542.9	276.6	4.6	5.5	37.8	
Damietta	5.1	—	—	—	74.2	83.5	—	—	11.8	
Suez	—	—	4.2	—	123.4	133.2	—	—	35.5	
Frontier Districts	6.3	0.6	0.6	—	9.1	18.9	—	—	4.0	
Behera... ..	0.3	0.9	—	—	17.0	13.6	—	—	4.6	
Dakahlia	1.8	0.3	0.7	—	12.9	8.9	—	—	3.3	
Fouadia	—	—	—	—	2.3	3.2	—	—	0.6	
Gharbia	0.4	—	—	—	14.5	13.9	—	0.06	8.7	
Menoufia	0.2	1.6	—	—	6.5	5.2	—	—	1.8	
Kaliubia	0.7	0.3	—	—	23.1	22.8	—	—	6.0	
Sharkia	0.4	—	—	—	7.1	6.0	—	—	5.5	
Aswan	—	—	—	—	2.9	11.4	—	—	3.2	
Assiut	0.1	0.07	0.7	—	11.5	10.3	0.07	—	4.8	
Beni Suef	—	1.2	—	—	5.2	7.2	—	—	1.1	
Fayoum	—	—	—	—	13.3	8.2	—	—	0.6	
Gerga	—	0.1	—	—	8.8	8.4	—	—	3.1	
Giza	0.2	0.6	—	—	39.1	29.6	0.1	—	10.8	
Minia	—	—	—	—	5.9	5.4	—	0.09	1.4	
Qena	—	0.08	—	—	3.8	5.2	—	—	0.3	
TOTAL	0.5	0.4	0.04	0.01	38.7	32.6	0.1	0.8	12.4	

PER 100,000 POPULATION 1950 AND 1951.

Diphtheria		Measles		Pulmonary T.B.		Acute Pneumonia		Chicken Pox		Puerperal Sep.		Dysentery	
	51	50	51	50	51	50	51	50	51	50	51	50	51
1	24.1	26.2	97.9	159.4	111.8	96.0	124	32.7	33.8	6.5	8.1	8.0	9.7
6	26.0	117.3	287.0	117.3	87.1	292.2	344.0	56.7	54.1	10.1	7.9	26.0	16.4
3	2.1	0.7	4.1	2.1	11.7	21.4	18.6	1.4	10.3	—	0.7	1.4	1.4
5	13.0	43.5	55.4	82.3	89.0	147.2	140.3	100.0	66.9	1.0	1.5	16.4	15.5
1	5.0	—	1.6	38.8	8.2	28.7	13.1	8.4	42.6	—	—	—	—
9	16.3	6.8	31.9	53.3	56.4	105.7	104.6	49.0	39.2	5.1	9.8	5.66	14.7
7	7.8	56.4	934.0	10.2	10.5	10.8	10.5	21.1	39.9	1.1	—	29.8	48.8
8	2.7	4.5	16.8	8.0	8.4	4.0	9.1	5.2	9.0	0.07	0.3	0.5	1.0
2	4.7	1.8	11.9	19.4	19.4	3.0	2.8	1.2	2.2	0.6	0.3	1.4	0.2
4	0.4	1.1	3.2	8.2	7.9	2.1	2.3	1.9	1.9	—	0.2	3.8	2.0
3	7.1	3.6	13.1	16.9	11.8	6.7	6.3	5.0	4.8	0.2	0.3	1.5	0.6
7	1.6	13.7	51.6	10.3	6.4	2.0	2.1	1.5	2.3	0.8	1.0	1.0	0.4
9	7.4	1.5	36.6	22.0	15.1	10.8	12.0	4.5	1.0	0.4	0.8	2.0	0.9
9	3.0	1.2	12.2	12.4	4.3	1.6	0.07	4.2	2.3	0.07	0.4	4.6	5.5
0	2.5	—	2.5	35.3	26.4	2.6	1.6	1.0	2.9	0.3	—	2.3	—
5	2.6	2.2	17.7	9.8	12.4	6.7	5.1	0.8	1.7	0.7	0.5	3.7	0.2
2	2.1	4.4	8.1	13.9	15.5	1.2	10.3	2.0	2.8	0.3	0.6	0.9	0.7
1	3.0	8.7	23.4	18.2	20.6	4.6	7.1	2.7	5.8	0.4	0.1	8.4	0.7
9	1.7	6.4	31.9	8.3	7.1	4.3	3.1	0.9	0.9	0.2	0.1	1.4	1.1
6	6.3	3.5	67.3	11.4	14.1	13.3	22.8	7.8	10.7	0.8	1.8	0.5	1.6
3	2.2	33.7	19.7	4.7	5.6	3.0	5.8	1.0	3.4	0.3	0.5	18.7	24.3
7	0.4	11.1	10.7	11.4	11.5	3.8	4.7	0.2	0.08	0.6	0.6	4.4	3.1
8	6.9	15.0	51.5	34.4	27.1	31.3	37.6	10.0	10.4	1.6	1.8	5.8	5.0

TABLE NO. 15.—INFECTIOUS DISEASES CAS

Localities	Influenza		Malaria New		Malaria Recurrent		Anthrax		Whooping	
	50	51	50	51	50	51	50	51	50	
Cairo	124.4	126.2	22.8	14.9	0.4	0.3	—	—	6.1	
Alexandria	214.5	282.8	9.0	11.2	—	—	—	—	26.6	
Ismailia	25.0	35.7	40.0	10.7	—	—	—	—	2.1	
Port Said	346.1	217.7	39.4	16.0	—	—	—	—	2.6	
Damietta	69.1	67.1	23.6	3.2	—	—	—	—	—	
Suez	55.7	49.0	10.1	5.7	5.1	3.3	—	—	10.1	
Frontier Districts	11.4	10.5	87.1	177.6	—	18.3	—	—	—	
Behera... ..	9.9	21.6	14.0	23.6	0.5	2.9	—	—	1.6	
Dakahlia	11.3	8.7	17.7	6.1	0.5	1.2	—	—	0.2	
Fouadia	7.7	1.3	25.2	4.5	59.5	57.5	—	—	—	
Gharbia	16.5	16.7	7.6	6.6	—	—	0.1	0.3	2.1	
Menoufia.....	9.2	10.2	2.1	1.7	6.8	5.4	0.08	—	2.3	
Kaliubia	31.1	35.5	55.8	—	4.4	5.0	—	—	0.8	
Sharkia	6.4	2.1	67.4	42.5	2.9	9.0	—	—	1.9	
Aswan	12.6	21.9	—	—	—	0.3	—	—	2.3	
Assiut	16.4	13.2	4.9	0.8	0.07	—	—	—	1.8	
Beni Suef	8.7	14.3	36.5	10.6	0.2	0.7	—	—	—	
Fayoum	3.9	6.0	8.4	12.1	21.6	5.2	—	—	13.3	
Gerga	4.9	5.0	0.9	0.1	—	0.1	—	—	0.4	
Giza	25.5	27.7	27.7	5.7	0.1	—	—	—	27.0	
Minia	13.0	8.1	45.8	2.2	0.4	0.09	—	—	2.4	
Qena	9.6	12.7	4.1	0.9	1.4	3.6	—	0.3	3.8	
TOTAL	38.2	41.2	20.8	12.4	8.1	4.3	0.01	0.04	4.8	

PER 100,000 POPULATION 1950 AND 1951 (contd.)

	Parotitis	Undulant fever		Leprosy		Tetanus		Acute Poliomyelitis		Erysipelas	
	51	50	51	50	51	50	51	50	51	50	51
3.9	41.0	2.6	2.4	0.2	0.04	2.7	2.8	0.04	0.3	13.5	19.6
3.0	50.5	0.1	0.2	0.2	—	4.7	6.7	0.3	0.4	61.8	57.5
2.1	2.8	—	—	—	—	1.4	6.2	—	—	2.1	1.4
5.6	7.5	—	—	0.5	—	6.1	3.0	—	—	55.4	38.4
3.4	—	—	—	—	1.6	5.1	—	—	—	18.5	1.2
5.1	49.8	—	2.0	1.7	—	1.7	0.8	—	—	11.8	8.2
7.0	40.5	—	—	0.6	—	—	0.6	—	—	4.0	3.3
4.4	13.3	0.1	—	—	0.07	4.0	3.7	—	0.2	3.4	3.9
3.1	1.3	0.2	—	1.1	1.2	1.4	1.9	—	—	5.1	3.6
0.1	4.9	0.1	—	0.2	0.1	2.1	2.6	—	—	3.1	1.7
3.6	8.3	0.2	0.06	0.2	0.2	2.6	2.3	0.1	0.06	4.3	5.8
1.1	8.4	0.08	—	1.7	3.1	4.2	3.6	—	—	2.6	4.8
1.2	2.7	0.1	0.8	0.4	0.8	2.4	2.6	—	—	4.7	7.1
2.8	3.5	—	0.07	0.5	1.1	1.6	1.3	0.1	0.07	3.4	2.9
1.0	0.6	—	—	0.6	2.9	0.3	1.3	—	—	0.6	1.3
1.4	1.3	—	—	1.0	0.6	2.6	3.0	—	0.1	1.1	0.7
0.2	3.4	—	—	15.7	2.5	1.4	1.0	—	—	2.2	3.1
5.7	1.9	0.1	—	0.8	0.5	1.1	1.5	—	0.1	2.2	2.5
0.3	1.0	—	—	0.7	1.9	1.0	1.0	—	—	0.7	0.4
4.4	8.3	0.9	0.5	0.9	0.9	1.5	3.5	—	—	2.0	4.8
1.1	0.9	0.2	—	1.4	1.2	1.9	2.4	—	—	3.4	3.0
0.3	0.4	—	—	1.0	0.3	1.1	1.3	—	—	0.5	0.9
8.5	11.2	0.4	0.4	1.1	0.9	2.3	2.7	0.04	0.09	7.4	8.0

TABLE No. 16.—INFECTIOUS DISEASES

Localities	Typhus		Typhoid fever		Cerebro Spinal Fever.		Diphtheria	
	50	51	50	51	50	51	50	51
Cairo	4	1	319	274	153	33	120	135
Alexandria	—	—	71	57	68	59	72	55
Ismailia	—	—	7	6	2	4	2	1
Port Said	—	—	27	17	6	9	5	6
Damietta	—	—	2	4	3	—	3	4
Suez... ..	—	—	8	12	2	2	8	5
Frontier Districts	1	1	3	2	2	2	3	3
Behera	1	1	21	20	16	12	17	17
Dakahlia	3	1	31	24	6	13	15	42
Fouadia	—	—	3	2	—	3	7	1
Gharbia	2	—	39	34	28	15	81	102
Menoufia	—	2	13	11	7	9	36	17
Kaliubia... ..	2	—	30	18	10	13	46	40
Sharkia	1	—	17	18	23	14	19	25
Aswan	—	—	2	7	3	3	2	6
Assiut	2	—	20	20	12	8	23	14
Beni-Suef	—	2	2	10	2	5	7	14
Fayoum	—	—	18	7	2	5	19	19
Gerga	—	—	22	16	12	10	13	18
Giza	—	1	167	80	33	21	70	52
Minia	—	—	5	12	10	2	22	21
Qena	—	—	9	11	1	—	7	—
TOTAL	16	9	836	662	401	242	597	597

DEATHS, 1950—1951

Measles		Pulmonary T.B.		Acute Pneumonia		Chicken pox		Puerperal Septicaemia		Dysentery	
50	51	50	51	50	51	50	51	50	51	50	51
260	1081	1,548	1,374	1,429	1,776	2	2	20	25	87	73
60	211	597	564	1,409	1,669	—	1	10	6	47	25
4	10	55	61	233	173	—	—	—	1	6	5
9	27	148	137	49	74	—	—	1	—	3	2
—	1	27	26	2	3	—	—	—	—	1	—
—	53	47	32	18	11	—	1	1	2	1	—
10	388	21	9	6	15	—	—	1	—	2	—
19	97	133	121	41	112	1	2	—	1	7	1
6	14	238	147	27	49	—	—	2	5	1	7
—	2	36	22	17	6	—	—	—	1	2	2
1	48	189	184	250	315	—	—	3	6	8	8
23	72	98	169	50	130	—	—	1	8	3	1
—	57	105	121	49	87	—	—	—	2	2	4
5	36	143	76	62	96	—	—	5	5	3	6
2	2	70	49	245	188	—	—	5	5	—	3
19	247	110	127	87	144	—	—	2	7	19	10
1	43	64	71	71	32	1	—	—	4	—	3
14	73	109	58	18	39	—	—	1	—	—	—
41	131	50	48	71	250	—	—	—	1	2	1
15	194	194	149	112	89	1	—	6	2	5	6
54	73	82	69	19	69	—	1	—	5	3	5
55	55	50	48	98	269	—	—	5	5	1	20
598	2,915	4,114	3,689	4,383	5,874	5	8	59	88	203	182

TABLE NO. 16. — INFECTIOUS DISEASE

Localities	Influenza		Malaria New-Cases		Anthrax		Whooping Cough	
	50	51	50	51	50	51	50	51
Cairo	9	8	4	3	—	—	11	—
Alexandria	2	4	1	—	—	—	17	—
Ismailia	—	—	—	—	—	—	1	—
Port Said	2	—	—	—	—	—	1	—
Damietta	—	—	—	—	—	—	—	—
Suez... ..	—	—	—	—	—	—	—	—
Frontier Districts... ..	—	—	—	16	—	—	—	—
Behera	2	9	3	—	—	—	1	—
Dakahlia	4	2	1	—	—	—	1	—
Fouadia	—	—	1	—	—	—	—	—
Gharbia	3	2	1	—	1	—	2	—
Menoufia	1	4	3	1	—	—	—	—
Kaliubia	4	11	—	—	—	—	1	—
Sharkia	6	5	—	2	—	—	1	—
Aswan	1	2	—	—	—	—	—	—
Assiut	5	6	—	—	—	—	8	—
Beni Suef	10	3	—	—	—	—	—	—
Fayoum	3	1	—	2	—	—	—	—
Gerga	2	2	—	—	—	—	—	—
Giza	0	2	1	—	—	—	6	—
Minia	13	9	—	1	—	—	—	—
Qena	4	4	—	—	—	3	2	—
TOTAL	71	74	15	25	1	3	55	—

HS 1950 — 1951 (contd.)

Parotitis		Undulant fever		Leprosy		Tetanus		Poliomyelitis		Erysipelas	
	51	50	51	50	51	50	51	50	51	50	51
	—	—	1	—	—	32	41	1	4	17	7
	—	—	—	—	—	32	38	—	3	10	5
	1	—	—	—	—	3	9	—	—	1	—
	—	—	—	—	—	4	2	—	—	—	—
	—	—	—	—	—	—	1	—	—	—	—
	—	—	—	—	—	1	1	—	—	—	—
	—	—	—	—	—	—	—	—	—	1	—
	—	—	—	5	2	37	42	—	—	—	—
	1	—	—	2	4	26	20	—	—	—	2
	1	—	—	2	1	13	11	—	1	2	—
	—	—	—	2	1	31	43	—	2	3	2
	—	—	—	7	43	34	38	—	—	1	2
	—	—	—	3	11	19	24	—	—	2	4
	—	—	—	5	—	16	17	—	1	4	5
	—	—	—	1	1	—	3	—	—	—	—
	—	—	—	1	7	25	34	—	—	3	2
	—	—	—	3	5	10	8	—	—	1	1
	—	—	—	1	2	4	6	—	1	3	—
	—	—	—	7	3	13	16	—	—	—	—
	—	—	1	3	5	23	21	—	—	2	3
	—	—	—	5	25	18	14	—	—	2	2
	—	—	—	2	4	6	10	—	—	—	—
	3	—	2	49	105	347	399	1	12	52	35

TABLE No. 17.—INFECTIOUS DISEASES DE

Localities	Typhus		Typhoid fever		Cerebro Spinal fever		Diphtheria	
	50	51	50	51	50	51	50	51
Cairo	0·2	0·04	14·2	11·9	6·8	1·4	5·4	
Alexandria	—	—	7·1	4·5	6·8	5·7	7·2	
Ismailia	—	—	5·0	4·1	1·4	2·8	1·4	
Port Said	—	—	13·8	8·5	3·1	2·5	2·6	
Damietta	—	—	3·4	6·5	5·1	—	5·1	
Suez	—	—	6·8	9·8	1·7	1·6	8·6	
Frontier Districts	0·6	0·6	1·7	1·1	1·1	1·1	1·7	
Behera... ..	0·07	0·07	1·6	1·5	1·2	0·9	1·3	
Dakahlia	0·2	0·06	2·0	1·5	0·4	0·8	1·0	
Fouadia	—	—	0·4	0·2	—	0·4	0·9	
Gharbia	0·1	—	2·3	1·9	1·7	0·9	4·7	
Menoufia	—	0·2	1·0	0·9	0·6	0·7	2·9	
Kaliubia	0·3	—	4·0	1·4	1·3	1·7	6·1	
Sharkia	0·07	—	1·2	1·3	1·7	1·0	1·4	
Aswan	—	—	0·6	3·2	1·0	1·0	1·0	
Assiut	0·1	—	0·3	1·3	0·3	0·5	1·6	
Beni Suef	—	0·3	0·3	1·5	0·3	0·7	1·0	
Fayoum	—	—	2·5	1·6	2·7	0·7	2·0	
Gerga	—	—	1·6	1·2	0·9	0·7	1·0	
Giza	—	0·1	18·2	8·6	3·6	2·2	7·6	
Minia	—	—	0·4	1·0	0·8	0·2	2·0	
Qena	—	—	0·8	0·9	0·08	—	0·6	
TOTAL	0·08	0·04	4·1	3·2	2·0	1·2	2·9	

PER 100,000 POPULATION, 1950—1951

Measles		Pulmonary T.B.		Acute Pneumonia		Chicken Pox		Puerperal Septicaemia		Dysentery	
	51	50	51	50	51	50	51	50	51	50	51
6	47.1	69.2	103.4	63.9	76.9	0.08	0.09	0.8	1.1	3.9	3.2
0	20.4	59.3	54.4	140.1	161.2	—	0.1	1.0	0.6	4.7	2.4
8	6.9	9.3	41.9	166.3	119.0	—	—	—	0.7	4.3	3.4
9	13.5	55.7	68.4	25.0	37.0	—	—	0.5	—	1.5	1.0
	1.6	45.5	42.6	3.4	5.0	—	—	—	—	1.6	—
	43.3	39.7	26.1	15.2	9.0	—	0.8	0.8	1.6	0.8	—
7	215.3	12.0	5.0	3.4	8.3	—	—	6	—	1.1	—
4	7.1	9.9	8.8	3.1	8.2	0.07	0.1	—	0.07	0.5	0.07
4	0.9	15.6	9.4	1.8	3.1	—	—	0.1	0.3	0.07	0.4
	0.2	4.4	2.6	2.1	0.7	—	0.1	—	0.1	0.2	0.2
06	2.7	11.1	10.5	14.7	18.1	—	—	0.2	0.3	0.5	0.5
8	5.7	7.9	13.3	4.0	10.2	—	—	0.08	0.6	0.2	0.08
	7.4	14.0	15.8	6.5	11.4	—	—	—	0.3	0.3	0.5
4	2.6	10.4	5.4	4.5	6.8	0.2	—	0.4	0.4	0.2	0.4
0	0.6	2.26	15.6	9.3	59.7	—	—	0.3	—	—	1.0
3	16.6	7.5	8.5	6.0	9.7	—	—	0.1	0.5	1.3	0.7
2	6.4	9.8	10.6	10.8	4.78	0.1	—	—	0.6	—	0.4
0	10.0	15.3	8.0	2.5	5.4	—	—	0.1	—	—	—
0	9.4	3.6	3.5	6.7	18.0	—	—	—	0.07	0.1	0.7
6	20.7	31.2	15.9	12.2	9.5	—	—	0.7	0.2	0.5	0.6
8	6.4	7.3	8.4	1.7	6.0	—	0.09	—	0.4	0.3	0.4
7	4.6	4.2	4.0	8.3	22.6	—	—	0.4	0.4	0.08	1.7
9	14.0	20.2	17.7	21.5	28.1	0.2	0.04	0.3	0.4	1.0	1.0

TABLE No. 17.—INFECTIOUS DISEASES D

Localities	Influenza		Malaria New		Anthrax		Whooping	
	50	51	50	51	50	51	50	
Cairo	0·4	0·3	1·4	0·1	—	—	0·5	
Alexandria	0·2	0·4	0·1	—	—	—	1·7	
Ismailia	—	—	—	—	—	—	0·7	
Port Said	1·0	—	—	—	—	—	0·5	
Damietta	—	—	—	—	—	—	—	
Suez... ..	—	—	—	—	—	—	—	
Frontier Districts... ..	—	—	—	8·8	—	—	—	
Behera	0·1	0·7	0·2	—	—	—	0·07	
Dakahlia	0·3	0·1	0·07	—	—	—	0·07	
Fouadia	—	—	0·1	—	—	—	—	
Gharbia	0·2	·1	0·06	—	0·06	—	0·1	
Menoufia... ..	0·08	0·3	0·2	0·08	—	—	0·2	
Kaliubia	0·5	1·4	—	—	—	—	0·1	
Sharkia	0·4	0·4	—	0·1	—	—	0·07	
Aswan	0·3	0·6	—	—	—	—	—	
Assiut	0·3	0·4	—	—	—	—	0·5	
Bien Suef	5·1	0·4	—	—	—	—	—	
Fayoum	0·4	0·1	—	0·3	—	—	—	
Gerga	0·1	0·1	—	—	—	—	—	
Giza	—	0·2	0·1	—	—	—	0·7	
Minia	1·2	0·8	—	0·09	—	—	—	0·
Qena	0·3	0·3	—	—	—	0·3	0·2	
TOTAL	0·3	0·4	0·07	0·1	0·01	0·01	0·3	0

PER 100,000 POPULATION, 1950—1951 (*contd.*)

otitis	Undulant fever		Leprosy		Tetanus		Acute Poliomyelitis		Erysipelas		
	51	50	51	50	51	50	51	50	51	50	51
—	—	—	0.04	—	—	1.4	1.8	0.04	0.2	0.8	0.3
—	—	—	—	—	—	3.2	3.7	—	0.3	1.0	0.5
0.6	—	—	—	—	—	2.1	6.2	—	—	0.7	
—	—	—	—	—	—	2.0	1.0	—	—	—	
—	—	—	—	—	—	—	1.6	—	—	—	—
—	—	—	—	—	—	0.8	0.8	—	—	—	—
—	—	—	—	—	—	—	—	—	—	0.6	—
—	—	—	—	0.4	0.1	2.8	3.1	—	—	—	
—	—	—	—	0.1	0.3	1.7	1.3	—	—	—	0.1
—	—	—	—	0.2	0.1	1.6	1.3	—	0.1	0.4	
0.06	—	—	—	0.1	0.06	1.8	2.5	—	0.1	0.2	0.1
0.08	—	—	—	0.7	2.7	2.7	3.0	—	—	0.08	0.2
—	—	—	—	0.4	1.4	2.5	3.1	—	—	0.3	0.5
—	—	—	—	0.4	—	1.2	1.2	—	0.07	0.3	0.4
—	—	—	—	0.3	0.3	—	1.0	—	—	—	—
—	—	—	—	0.07	5.6	1.7	2.3	—	0.1	0.1	0.1
—	—	—	—	0.5	0.7	1.5	1.2	—	—	0.2	0.1
0.5	—	—	—	0.1	0.3	0.7	0.8	—	0.1	0.4	—
—	—	—	—	0.5	0.2	1.0	1.0	—	—	—	0.4
—	—	—	0.01	0.3	0.5	2.5	2.2	—	—	0.2	0.3
—	—	—	—	0.4	2.2	1.6	1.2	—	—	0.2	0.2
—	—	—	—	0.2	0.3	0.5	0.8	—	—	—	0.9
0.01	—	—	0.01	0.2	0.5	1.7	1.9	0.01	0.06	0.2	0.3

Frontier Districts Medical Service.

Vital Statistics :

The population of the frontier districts totalled 185,187. The births totalled 8,042 or 43 per thousand of the population. The deaths totalled 3,705 or 20 per thousand. Infantile deaths under one year of age numbered 1,360 or 36% of total deaths. The causes of these deaths are mainly congenital debility, gastritis and enteritis and broncho pneumonia.

Anti Small pox vaccination :

Of 7,344 infants vaccinated against small pox, 6,620 or 90% gave successful results.

Prophylactic Vaccination :

377 persons were inoculated against typhoid, 1,220 against diphtheria, 190 against cholera and 35 against plague.

Infectious Diseases :

No cases of typhus occurred in the frontier districts except one in Amria village as compared with 12 cases in the same village during the previous year. Three cases of cerebro spinal fever were recorded as against seven in the preceding year. The cases were reported from Kharga, Amria and Kantara East. Measles broke out in Kharga, Dakhla and Baharia oases. 670 cases were reported from the first, 610 from the second and 352 from the third. 151 cases of malignant malaria were reported from Siwa and 141 from Baharia oases.

Pilgrims :

These numbered 197. 5 pilgrims died in the Hedjaz and none of the returning pilgrims developed any illness.

Potable Water Supply :

(1) The population of the oases draw their drinking water from natural sources, i.e. artesian wells or springs. They carry the water by their special means.

(2) In the Western desert and as far as Mersa Matruh, the population draw their water from the Alexandria —Mersa Matruh filtered water supply. Mersa Matruh has also an auxiliary unfiltered water supply in the way of artesian wells and Roman cisterns. Sidi Barrani draws unfiltered water from the artesian wells.

(3) Quseir, Safaga, and Sollum have condensers for turning sea water into fresh water.

(4) At Abu Zenima and Hurghada, water is carried in tanks on vessels from Suez to the people who are mostly workmen in the employ of the companies.

(5) In the Eastern desert, the people in Arish draw their water from artesian wells. At Kantara East, there is a filtered water works.

Sewage Disposal :

Public sewage disposal systems do not exist in the frontier districts. The dug-in latrine is the type in common use. When filled in, it is evacuated in the fields and used as manure. Where companies operate, the pail system is used in residence of staff.

Refuse is collected by sweepers of the Ministry of Public Health or the companies and burnt in incinerators.

Birkas : (Ponds.) :

At Wadi Natroun, Arish, Tor, Siwa and Baharia oases, birkas exist round the springs. At Dakhla and Kharga oases, temporary birkas are formed in rice cultivations.

Cemeteries :

None exist in certain district, e.g. Dabaa and Abu Zenima where the Arabs bury their dead in the desert.

Slaughter Houses :

There is a slaughter-house annexed to every frontier district medical unit, except at Sollum, Hammam, Dabaa, and Abu Zenima.

Municipal and Local Councils :

A few have recently been established in some of the districts. The oldest have only been a few years in existence. Scavenging, a pure municipal responsibility, is still carried out by public health scavengers.

Food Control :

The scarcity of samples of foodstuffs taken for analysis is due to the low economic standards and lack of sanitary technicians.

Unhealthy Establishments :

The localities having no sanitary technicians are devoid of licensed establishments, e.g. Hurghada, Wadi Natroun, Safaga and Abu Zenima.

Medico Legal Cases :

The serious and fatal criminal cases were very few in proportion to the total cases.

Venereal Diseases :

No venereal diseases cases of any importance were met with among out-patients or in-patients. This may be explained by either ignorance of the population, their custom of not submitting such infections to medical inspection or scarcity of the incidence of these diseases.

Health Propaganda :

This is not carried out on a wide scale. It is suggested that two vehicles equipped with cinema apparatus be provided to frontier districts for propaganda purposes.

Hospitals :

There are ten government and seven private hospitals with a total accommodation of 253 beds. The former have eight medical officers and the latter seven. During the year, 660 in-patients and 103,908 out-patients were dealt with by these hospitals. These figures do not include out-patients dealt with by health offices in localities having no hospitals.

Public Health Offices provided with Pharmacies :

These are seven in number and have treated 34,119 out-patients during the year.

Medical Personnel :

There is a serious shortage of medical personnel in the frontier districts.

Chapter III.— Nutrition

1.—Surveys :

(1) 1,000 workers at Gebel El Asfar farm and their families were examined to determine their nutritional status. The plasma, protein and hemoglobin levels were also estimated in 25 of them. The following were the results obtained :

Pellagra incidence rate is 1.1%

Riboflavin deficiency 4.3% (43 per thousand). Most cases were males.

Plasma protein levels varied between 6.5 and 10.5 gr. per cent. The hemoglobin level varied between 85 and 100% (14.5gr.=100%). No incidence of pellagra or riboflavin deficiency were detected among the technical, clerical or janitor staff of the farm.

(2) Data of pellagra cases attending the following units during the last four years were collected with a view to enrich flour with vitamins and mineral salts :

(a) Billharzia and ancylostoma units throughout the country (Endemic diseases hospitals).

(b) The Research Institute.

(c) Mental Hospitals.

(d) Manial Hospital.

(3) A study was made of diets in the various units of the Ministry particularly in Alexandria hospital, Manial hospital, King's hospital and T.B. disease hospitals to estimate how far they meet the actual requirements. Various unified diets were proposed

(4) A study was carried out at Manial hospital on the effect of cooking on the weight of various foodstuffs : namely potatoes, rice, macaroni and different kinds of beef.

(5) Experiments were made on cooking of certain national dishes for estimating their nutritional value : Busara and Taameya.

(6) Analysis of stewed broad-beans and its broth was carried out to compare their food values, with the following results :

	Beans solid			Liquid		
	Max.	Min.	Mean.	Max.	Min.	Mean.
	%	%	%	%	%	%
Protein	8.85	7.55	8.03	6.47	3.78	4.9
Starch	14.5	11.4	13.2	11.3	5.98	8.33
Fat	0.65	0.3	0.43	0.4	0.17	0.22
Minerals	0.82	0.57	0.73	0.75	0.4	0.61
Fibre	4.59	5.8	5.18	0.55	0.15	0.41
Moisture	74.4	71.2	72.4	88.1	81.2	85.4

This shows that the broth has an appreciable nutritive value since it contains moderate amounts of proteins, carbohydrates and minerals in addition to the vitamins dissolved in water.

(7) At the request of the Ministry of National Defence, samples of Rass and Rummy local made cheese were analysed for comparison of their nutritive value, with the following results :

	Rass Cheese			Rummy Cheese		
	Max.	Min.	Mean.	Max.	Min.	Mean.
	%	%	%	%	%	%
Proteins	26.1	22.8	24.2	26.7	21.4	23.7
Fat	41.4	34.7	39.04	42.9	36.4	39.9
Minerals	6.4	3.8	5.06	7.3	5.1	5.8
Moisture	28.5	15.1	23.69	29.7	18.7	24.8

This shows that the nutritive value of both types of cheese is almost the same.

(8) In connection with the proposal of enriching flour with minerals and vitamins, locally produced ferrous sulphate and calcium carbonate were considered as a substitute for highly priced imported products.

- (a) *Ferrous Sulphate* : Commercial, refined and dehydrated samples were analysed. The commercial and refined samples were free from harmful minerals and complied with the British pharmacopia. The commercial sample was recommended for its cheapness.
- (b) *Calcium carbonate* : Of a few samples analysed, one was found free from harmful substances and contained a larger proportion of calcium carbonate. The following is the result of analysis :

Substances	Proportion
	%
Calcium carbonate	95.6
Solids insol. in acid	0.045
Chlorides	0.03
Sulphate	trace
Magnesium	„
Arsenic	Nil

This led to a reduction of 95% of the cost of mineral salts required.

II.—Activities of the Permanent Nutrition Committee :

Undertaking technical secretariat duties and submitting the government annual report on nutritional conditions in Egypt to the F.A.O.

III.—(a) *Educational Missions* : A few members of the staff have been sent on educational missions to U.S.A., England and Cairo Universities. Some have returned, while the others are still on their missions.

(b) *Lectures* : Lectures were delivered in the Nutrition Section on the following subjects :

Sources of protein — Food between taste and value — Feeding during pregnancy and lactation — A good breakfast starts a good day.

Chapter IV.— Food Control

TABLE NO. 18—STATISTICS SHOWING WORK DONE BY FOOD CONTROL GANGS
IN CUSTOMS HOUSES DURING 1951

A.—Consignments examined and Results of samples taken therefrom

No. of Consignments examined	No. of Samples taken	Results of Analysis		
		Genuine	Unfit	Adulterated
14,572	1,143	955	86	102

B.—Foodstuffs condemned or refused entry into the country.

Kind of Food	Kilos	Sacks	Bottles	Cans	Boxes,
(a) <i>Fresh Foods :</i>					
Vegetables and Fruits	20,946	—	—	—	801
Fish	1,185	—	—	—	—
Meat	3,547	—	—	—	11
(b) <i>Canned Foods :</i>					
Jams and dried fruits	4,122	529	—	—	—
Fruits and Vegetables	4,106	—	—	12,340	755
Fish	4,934	—	—	17,383	3,404
Meat	6,999	—	—	2,163	199
Milk	313	—	—	1,756	22
(c) <i>Oils :</i>					
Olive oil	2,778	—	—	3	18
Other oils	842	—	—	31	54
Fats	103	—	—	53	—
(d) <i>Seeds and Corn :</i>					
Rice	11	925	—	—	—
Flour	2,275	50	—	—	—
Maize	422,446	—	—	—	—
Beans	12	—	—	—	—
Sorn	220,556	—	—	—	—
(e) <i>Other Foods :</i>					
Spices	943	—	—	68	—
Pepper	5,080	241	—	—	—
Tea	11,827	—	—	6,703	498
Coffee	19,883	—	—	—	—
Imitation Coffee	—	—	—	545	—
Tamarind	—	50	—	—	—
Chemicals for aerated water ...	—	—	—	353	11
Vaniline	—	—	—	—	2
Flour products	8	—	—	39	—
Sweets and Chocolate	218	—	—	—	—
Sugar	2,805	—	—	—	—
Cheese	2,114	—	—	3,600	—
Butter and masli	123	—	—	794	23
Alcoholic drinks	5,759	—	—	—	18
Non Alcoholic drinks	33	—	—	—	—
Chestnuts	7,125	—	—	—	—
Dry dates	21,168	—	—	16	—
Cocoa nut	5,400	—	—	—	—
Mineral water	6	—	72	—	—
Aerated „	—	—	53	—	—
Vinegar	8	—	5	—	—
Shewing Gum	12,725	—	—	—	—
Colouring matters	85,145	—	—	—	—
Saffron	10	—	—	—	—
Capsules	490	—	—	—	—
Utensils	780,183	—	—	—	—
Other articles	1,286	—	—	112	—
TOTAL	1,656,514	1,908	130	46,575	5,816

TABLE No. 19.—VARIOUS STATISTICS 1951

P.V. drawn up under law No. (48) of 1941	No. of P.V. drawn up against Itinerant Vendors	No. of P.V. drawn up against Milk Vendors	Itinerant ven- dors licensed during 1951	Milk Vendors licensed during 1951	Bandars to which Itinerant vendors Regula- tions were applied	Bandars to which Milk vendors Regular tions were applied
1,673	7,463	6,395	2,512	431	—	—

TABLE No. 20.—SAMPLES OF MILK TAKEN AND THE RESULTS OF THEIR ANALYSIS, 1951

No. of samples	Results of Analysis				
	Genuine	Adulterated by removal of fat	Adulterated by addition of water	Adulterated by, both	Percentag
13,173	12,038	594	438	103	8.6%

TABLE No. 21.—QUANTITIES OF FOODSTUFFS CONDEMNED AND NUMBER OF SAMPLES TAKEN AND RESULTS OF THEIR ANALYSIS DURING 1951

Name of Article	Foodstuffs Condemned					Samples taken				Percentage		
	Number	Bottles	Cans	Lbs.	Okes	No. of Samples	Genuine	Adulterated	Unft	Adulteration	Unfitness	
										%	%	
A.—FRESH FOODS												
Fruits and Vegetables	71,236	—	54	25,410	47,611	—	—	—	—	—	—	
Fish	3,053	—	—	1,345	3,265	—	—	—	—	—	—	
Meat	25	—	4	941	477	—	—	—	—	—	—	
Other Fresh Foods	9,425	3	11	485	345	—	—	—	—	—	—	
B.—COOKED FOODS	49,636	2	15	3,140	2,204	—	—	—	—	—	—	
C.—CANNED FOODS:												
Jams	—	73	474	2	34	28	27	—	1	—	3.5	
Milk and its products	—	—	220	98	10	5	5	—	—	—	—	
Fruits and Vegetables	764	142	2,197	753	2,932	97	82	—	15	—	15.4	
Meat	12	—	215	58	3	5	5	—	—	—	—	
Fish	935	—	4,656	1,177	231	234	218	—	16	—	6.8	
Other Canned Foods	590	68	857	294	6,630	34	32	—	2	—	6	
D.—OILS:												
Olive oil	—	—	—	42	8	168	155	4	9	2.3	5.4	
Sesame oil	—	—	—	—	4	251	247	3	1	1.2	0.4	
Linseed oil	—	—	—	2	319	323	275	19	29	5.9	8.9	
Lettuce oil	—	—	—	—	—	7	7	—	—	—	—	
Safflower oil	—	—	—	—	—	6	5	—	1	—	16.6	
Cotton seed oil	—	—	—	42	86	155	149	—	6	—	3.9	

— 47 —

[illegible]

Chapter V. — Rural Health

The objectives of rural health are :

(1) Raising the standards of environmental sanitation by the control of water supplies, installation of public baths and laundries, markets, slaughter houses, control of foodstuffs and flies and cleanliness of villages, encouragement of sanitation of village habitations by providing latrines, white washing of walls once a year and improvement of light and ventilation.

(2) Protection against infectious diseases by anti small pox vaccination of infants and their inoculation against Diphtheria and other infectious diseases, and the detection and control of infectious diseases.

(3) Providing treatment facilities, particularly for parasitic diseases, ophthalmias, diseases of mal nutrition as well as medical care of casualty and emergency cases.

(4) Providing the rural population with social health services including maternal and child welfare, control of venereal diseases and undertaking health education.

The Rural Health Section supervises the activities of rural health centres. Gratifying results have been achieved by these centres as may be evidenced by the following statistical data. The general and infantile death rates have dropped during late years in the areas served by these centres. The former was 14 per 1000 in 1950 as against 20 in 1949. The infantile mortality rate was 139 per 1000 births as against 184 in 1949. On the other hand, attendance at the out patient and in patient departments as well as the child welfare units has greatly increased. A mass treatment campaign against parasites has been organized by the Ministry within kaliubia Province. Table No. 30 gives details of the activities of Health centres during 1951.

Much of the difficulties that impeded the progress of health centres have been overcome, particularly the provision of medical officers and other personnel without whom nothing can be done. The responsibilities of the Rural Health Department increase year after year as a result of the policy of generalising health centres and increasing in-patient sections therein. The following table No. 22 demonstrates this increase :

Year	Population served by the H. centres.	Endemic diseases sections	No. of centres in operation	Child welfare sections	In-patient Sections	Out patients
1945	684,343	85	85	65	12	416,195
1946	1,141,441	103	103	82	27	490,117
1947	2,132,202	115	115	92	71	473,381
1948	2,610,928	129	129	123	84	587,819
1949	3,037,837	157	157	123	88	836,119
1950	3,267,399	178	178	124	98	1,253,999
1951	3,814,543	205	198	149	110	1,122,897

TABLE No. 23.—BIRTHS AND DEATHS IN AREAS SERVED BY HEALTH CENTRES.

Year	Population served	Births	Deaths	Inf. Deaths	Rate per thousand		
					Births	Deaths	Inf. Deaths
1948	2,610,928	110,552	50,960	28,647	42	20	189
1949	3,037,837	118,091	56,933	30,322	39	20	184
1950	3,267,399	154,597	58,561	21,116	37	18	136
1951	3,814,543	151,367	68,748	19,420	29.6	18	128

From this table it will be observed that the general and infantile death rates have decreased than what they were five years ago, despite the more accurate reporting of deaths and the increased sanitary supervision of births and deaths.

TABLE No. 24.—IS A STATEMENT OF THE INCIDENCE OF INFECTIOUS DISEASES DURING THE LAST FIVE YEARS IN THE AREAS SERVED BY HEALTH CENTRES :

Year	Plague	Typhus	Relap. fever	Typhoid	Cholera	Small Pox	Other diseases
1948	—	25	4	118	1	21	2,662
1949	—	87	186	244	—	44	2,948
1950	—	26	2	217	—	23	10,253
1951	—	37	—	197	—	38	1,720

Food Control :

Of 5,508 specimens taken for analysis, 174 were found adulterated or a ratio of 4.1%.

Treatment :

TABLE No. 25.—IS A STATMENT OF TREATMENT ACTIVITIES IN HEALTH CENTRES

Year	New Patients	New Ophthalmic Patients	Average No. of Patients per Centre	Average No. o ophthalmic Pats per Centre
1948	587,819	72,066	4,557	555
1949	836,119	106,270	5,325	675
1950	1,253,999	130,047	7,045	731
1951	1,122,897	133,697	5,665	670

This shows that the number of patients served by the centres as well as the average attendance per centre have been increasing year after year.

Endemic Diseases :

TABLE No. 26.—NUMBER OF NEW OUT-PATIENTS AND THOSE EXAMINED FOR ENDEMIC DISEASES.

Year	New out patients	Out-patients examined for endemic diseases and rates
1948	587,819	277,285 47%
1949	836,119	419,463 50%
1950	1,253,999	742,120 59%
1951	1,122 897	680,693 61%

This table shows that 61% of the new outpatients in 1951 were examined for endemic diseases as against 45% in 1949. It is anticipated that the time is not too far distant when all the outpatients could be examined for endemic diseases.

TABLE No. 27.—INCIDENCE AND TREATMENT OF BILHAR IASIS

Year	Number examined	Positive cases		Number commenced treatment	Number of Injections given	
		Number	Rate per cent		Total	Average per Patient
1948	277,285	137,034	60.3%	102,806	716,897	7
1949	419,463	337,372	56.8%	171,018	1,622,717	9
1950	742,120	396,973	53.5%	249,575	2,249,162	9
1951	680,693	331,657	48.7%	297,241	2,081,950	7

This shows that 48.7% of patients examined for endemic diseases during 1951 suffered from Bilharzia, as compared with 56.8% in 1949 and 60.3% in 1948. The decrease in bilharzia incidence was accompanied by a more regular attendance for treatment. The average number of injections per patient during 1949 and 1950 was 9 as against 7 in 1948.

TABLE No. 28.—CHILD WELFARE ACTIVITIES DURING THE LAST FOUR YEARS.

Year	New Pregnants	Average number of Preg. per centre	Number of New and old Pregnants	Average attendance per preg.	Home visits to Pregnants	Average home visit per pregn.
1948	30,738	304	106,110	3 times	40,036	1.3 times
1949	38,055	346	164,051	4.5 „	691.89	2 „
1950	44,061	376	221,816	5 „	86,656	2 „
1951	49,523	345	221,472	4.5 „	90,623	2 „

This shows that pregnant's attendance at the centres is more frequent than before. being five times in 1950 as against 4.5 in 1949 and 3 times in 1948.

TABLE No. 29.—CONFINEMENTS AND HOME VISITS TO PUERPERALS

Year	Number of Child Welf. Units	Number of Confinements	Average Confinements per centre	Number of Home visits to Puerperals	Average visits per puerperal
1948	101	31,812	315	174 629	5.5 times
1949	110	43,404	395	229,606	5.2 „
1950	117	46 607	400	271,701	6 „
1951	149	51,812	332	290,241	5.6 „

Environmental Sanitation :

The Sanitation Section carried out the following works during 1951 :

(1) Bore hole latrines : 9,882 latrines were bored in 10 villages.

(2) Scavenging : Scavenging of roads was undertaken in 7 villages in Giza and Dakahlia Provinces. Refuse was disposed of by incineration,

TABLE No. 30.—STATEMENT OF ACTIVITIES OF RURAL HEALTH CENTRES

Province	Population of Area	Births		Deaths			Vaccination against Sm. pox	Diphtheria			Cases of Infectious Diseases									Food Control				
		Total No. of Births	Still Births	Infants below 4 weeks	Infants below one year	Total Deaths		1st Shot	2nd Shot	3rd Shot	Plague	S. Pox	Typhus	Typhoid	C.S.F.	Measles	Diphtheria	Whooping Cough	Other Diseases	No. of times Food Condemned	Samples and Results			
																					Fit	adulterated	Unfit	
Kaliubia	177,428	10,159	37	302	1,246	4,545	6,784	1,838	1,018	682	—	—	1	32	8	157	19	95	343	554	169	24	7	
Menoufia	215,108	9,550	92	327	1,651	488	8,510	2,651	1,858	1,733	—	8	9	5	125	3	7	83	687	459	14	15		
Behera...	242,289	9,591	3	188	875	2,848	8,581	1,045	748	719	—	11	15	8	18	5	1	66	337	64	2	90		
Gharbia	378,635	19,028	66	619	1,987	8,544	16,960	2,249	1,886	2,116	—	12	15	11	72	27	7	82	1,389	481	4	14		
Fouadia	273,903	10,377	19	158	561	3,193	9,244	1,029	1,084	1,256	—	—	2	2	13	—	1	28	760	229	15	10		
Dakahlia	335,500	17,200	85	493	2,543	8,226	17,295	6,325	4,987	4,326	—	—	11	21	25	11	8	201	883	549	6	10		
Sharkia	377,328	15,440	38	301	1,577	7,067	12,727	1,924	1,626	1,380	—	—	—	28	10	132	7	6	99	1,196	357	7	7	
Giza	213,399	11,436	94	344	2,448	7,863	9,972	849	658	576	—	1	9	1	14	132	7	258	103	283	231	37	1	
Beni Suef	111,842	3,268	40	139	588	2,129	3,601	1,007	792	688	—	1	6	1	25	14	—	3	109	361	315	8	1	
Fayoum	199,761	5,931	37	493	1,383	3,176	5,927	868	643	600	—	2	9	1	6	36	1	10	61	418	152	5	—	
Minia	291,149	11,796	13	317	1,017	4,337	10,348	1,725	1,636	1,609	—	2	2	6	4	25	7	—	203	723	347	2	7	
Assiut...	333,905	9,992	11	273	1,359	5,351	9,326	1,975	1,695	1,437	—	—	—	2	4	25	1	—	91	392	175	11	2	
Gerga	272,128	7,458	7	203	953	2,802	5,816	724	641	534	—	—	—	17	5	1	1	—	36	43	245	20	8	
Qena	320,869	8,39	5	499	734	3,136	8,877	87	71	56	—	1	—	—	1	—	15	6	119	216	254	18	7	
Aswan...	71,299	3,42	1	45	444	1,653	2,881	193	152	171	—	—	7	2	1	—	2	—	28	65	91	1	1	
TOTAL...	3,814,543	151,367	548	4,800	19,420	68,748	136,885	25,289	19,495	17,892	8	38	37	197	131	685	105	394	1,712	8,617	4,154	174	180	—
RATE ...		29.6%	3.6%	31%	128%	18%																		...

TABLE No. 30.—STATEMENT OF ACTIVITIES OF RURAL HEALTH CENTRES (continued)

Province	Public Baths and laundries		No. of Out Patients		No. of ophth. Cases		Total No. of operations	In. Patients				Internal diseases				Surg. Operations				Deliveries				
	Using baths	Using laundries	New	Old	New	Old		No. of Patients				Internal diseases				Surg. Operations				Deliveries				
								Admissions	Cured	Improved	Died	Admissions	Cured	Improved	Died	Admissions	Cured	Improved	Died	Admissions	Cured	Improved	Died	
Kalubia	48,248	4,565	133,395	46,164	11,570	3,831	1,385	1,003	881	121	1	793	677	116	—	38	30	8	—	29	26	—	3	—
Menoufia	63,122	43,073	130,786	78,172	21,508	25,727	2,050	1,533	1,403	129	2	1,392	1,244	158	—	150	141	9	—	32	31	—	1	—
Behera	18,347	1,590	105,446	171,330	11,865	18,472	1,178	453	366	84	1	337	269	67	1	97	90	7	—	9	5	—	4	—
Gharbia	24,873	3,170	128,153	98,433	7,355	20,756	5,411	787	553	233	1	667	456	210	1	110	105	2	—	10	10	—	—	—
Fouadia	12,474	5,688	38,373	51,628	3,284	15,007	1,372	215	162	53	—	172	122	50	—	42	40	2	—	1	1	—	—	—
Dakahlia	9,096	2,800	147,148	174,338	9,779	20,542	3,256	770	541	228	1	550	325	124	1	109	102	7	—	14	11	—	2	—
Sharkia	25,451	6,509	132,120	123,841	13,630	14,275	1,322	1,064	1,000	63	1	686	642	43	1	361	355	6	—	17	17	—	—	—
Giza	48,151	4,275	87,065	24,803	11,079	19,340	1,692	835	581	257	—	798	528	270	—	50	37	13	—	35	35	—	7	—
Beni Suef	11,297	—	35,956	10,146	4,754	9,512	135	356	249	106	1	277	202	75	—	27	18	9	—	13	5	—	—	—
Fayoum	—	—	25,757	15,810	2,904	5,905	321	154	124	30	—	138	173	25	—	11	10	1	—	5	5	—	—	—
Minia	12,550	3,921	73,598	60,561	6,332	11,962	302	615	446	169	—	444	328	116	—	107	91	16	—	16	16	—	—	—
Assiut	13,751	17,443	90,464	84,325	10,289	9,572	450	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Gerga	20,691	11,635	72,682	52,164	7,602	10,709	265	317	241	75	1	600	329	171	1	11	8	3	—	2	2	—	—	—
Qena	32,162	661	39,159	9,791	6,508	10,186	70	64	64	—	—	64	64	—	—	—	—	—	—	—	—	—	—	—
Aswan	—	—	16,255	16,725	5,238	62,249	47	139	139	—	—	139	139	—	—	—	—	—	—	9	9	—	—	—
TOTAL	367,143	106,229	1,122,897	1,008,258	133,697	202,045	19,256	8,308	6,750	1,648	97,057	5,427	1,425	61,113	83	192	1,030	17	2	—	173	—	—	—
RATE	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

TABLE No. 30.—STATEMENT OF ACTIVITIES OF RURAL HEALTH CENTRES (continued)

ENDEMIC DISEASES																		
Province	Number of Cases of Intestinal Parasites							No. of Cases of Dysentery				No. of Bilharzial Cases					No. of Cases of Pellagra	
	No. of faecal Exam.	Positive Cases			No. of Cases treated	No. of Cases Exam. after treat	No. of Cases Cured	Positive	No. of Injec- tions	No. of Cases Exam. after treat.	No. of Cases cured	No. of specimens of Urine Exam.	Positive	No. of inj.	No. of Cases Exam. after treat.	Cured	Diag- nosed	Treated
		Ancylos- toma	Ascaris	Other Parasites															Intestinal Parasites
Kaliubia	51,714	6,517	16,319	2,933	24,183	17,495	2,025	1,793	181	634	66	56,435	23,101	119,220	5,040	4,310	140	137
Menoufia	69,157	8,491	49,084	3,422	52,631	4,0241	5,692	5,040	204	1,080	73	71,145	43,184	229,773	8,004	6,081	2,109	1,755
Behera	46,967	6,378	37,392	4,793	37,288	14,493	3,448	1,851	885	3,791	229	50,813	22,311	158,287	5,760	4,853	710	751
Gharbia	59,315	2,203	12,464	2,653	14,716	32,985	10,837	10,079	246	6,212	211	34,289	40,539	253,672	13,596	10,723	293	293
Fouadia	37,550	10,198	18,712	36,250	29,220	10,533	3,822	3,601	105	1,516	48	40,131	19,692	121,201	6,187	5,243	170	170
Dakahlia	62,945	5,758	21,068	2,881	25,345	18,557	7,369	5,875	208	1,052	122	71,943	41,284	268,440	14,220	11,122	237	211
Sharkia	46,794	3,251	22,500	4,328	27,664	18,047	3,145	2,769	204	701	65	52,092	33,086	189,440	7,274	5,969	122	120
Giza	36,826	8,644	7,420	3,030	19,557	12,021	2,410	1,747	43	270	17	51,099	23,435	184,412	7,032	5,603	134	134
Beni Suef	21,100	989	350	1,313	2,908	2,752	832	655	31	151	22	23,125	11,765	76,774	2,785	2,450	23	20
Fayoum	14,596	3,380	494	1,149	5,206	2,267	696	537	40	265	29	16,432	9,116	52,291	1,562	1,216	23	23
Minia	26,645	3,181	1,784	1,995	6,862	4,164	541	379	158	751	74	47,487	23,935	159,899	4,558	3,340	247	247
Assiut	32,885	3,538	401	1,168	4,168	3,535	1,477	1,454	134	683	94	38,181	9,074	63,300	3,248	2,905	242	231
Gerga	36,109	5,721	2,791	974	10,416	6,420	990	867	333	878	108	52,425	21,708	147,145	5,237	4,077	6	6
Qena	20,392	4,748	372	686	5,501	3,684	1,120	923	88	296	43	37,031	6,865	41,343	2,040	1,500	37	37
Asswan	4,822	—	1	45	55	3	—	—	223	1,161	196	7,967	2,580	15,748	2,327	1,706	—	—
TOTAL	557,817	72,997	191,152	67,612	265,949	187,198	44,305	37,588	3,085	19,441	1,671	680,693	331,657	2,081,950	88,870	71,098	4,493	4,135
RATE		12.8%	33.6%	12%	46.8%			84.8%	0.5%		83.6%		48.7%			80%		

TABLE No. 30.—STATEMENT OF ACTIVITIES OF RURAL HEALTH CENTRES (continued)

Province		MATERNAL AND CHILD WELFARE																
		Wassermann test and anti Syphilitic Treatment										Urine Analysis						
		Pregnants		N. of Blood Samples	Positive	Spoiled	Began Treatment			Completed Treatment			No. of Shots		No. of Samples	+ve for alb.		+ve for Sugar
							Wives	Husb.	Children	Wives	Husb.	Children				Bilharzia +ve	Bilharzia —ve	
Kaliubia	...	5,452	21,232	5,864	91	163	502	35	258	255	13	1,357	10,357	2,987	30,891	266	153	—
Menoufia	...	6,494	17,561	6,408	134	124	440	24	140	440	6	311	4,723	1,528	22,553	670	2,086	—
Behera	...	2,443	12,162	2,587	172	190	152	3	23	8	3	—	3,585	1,120	15,221	163	62	—
Gharbia	...	6,217	15,940	6,786	343	331	505	12	57	110	—	6	6,894	2,162	23,080	225	117	—
Fouadia	...	1,417	6,578	1,640	65	159	53	9	19	34	9	26	2,378	757	5,737	81	192	—
Dakahlia	...	4,617	22,479	6,363	378	512	357	23	11	71	—	8	5,439	1,346	25,773	138	2,007	—
Sharkia	...	4,109	10,554	3,823	194	190	165	80	17	116	63	8	1,154	363	14,893	200	2,080	—
Giza	...	4,587	17,648	4,910	122	147	319	14	106	142	12	87	6,966	3,222	24,154	53	73	—
Beni Suef	...	1,988	9,415	2,169	221	516	206	21	76	27	8	28	3,710	1,541	11,018	80	866	7
Fayoum	...	1,959	7,743	471	258	113	1,109	80	140	36	3	10	2,220	536	8,681	291	2,707	—
Minia	...	4,103	17,198	3,342	361	359	373	63	367	173	18	42	5,041	2,211	16,135	55	25	1
Assiut	...	2,319	8,601	2,564	408	356	2,452	61	24	177	64	10	5,439	3,135	12,071	47	130	—
Gerga	...	753	3,233	1,213	632	312	256	57	—	25	—	—	3,529	560	7,072	43	—	—
Qena	...	210	609	429	15	107	15	—	—	—	—	—	40	35	1,068	—	3	—
Aswan	...	101	898	137	23	23	12	—	—	12	—	—	—	222	1,153	3	—	—
TOTAL	...	49,523	171,949	48,706	3,417	3,647	6,934	502	1,265	1,926	199	1,893	61,474	21,698	219,480	2,435	10,501	8
RATE	...																	—

TABLE No. 30.—STATEMENT OF ACTIVITIES OF RURAL HEALTH CENTRES (continued)

MATERNAL AND CHILD WELFARE																	
Province	No. of Deliveries				Child Welfare				Home Visits					Invitation letters (to Visit centre)		No. of Lectures	
	Total Number arrival of nurse	Completed before arrival of nurse	In Pt. Section	from outside	No. of. Children	circumci- sions	S. pox vaccination	Diphth. immunisa- tion	Antenatal		During Puerp- erium	To Children		To Pregnants	To Mothers & Child	By M. Os.	By staff
									Total No. Attend	During 9th month		Non Attendants	Regular Visits				
Kaliubia	3,957	666	238	16	51,271	24	2,937	1,514	4,428	5,892	23,346	6,108	7,166	2,019	3,537	596	3,405
Menoufia	5,677	202	848	31	43,147	519	3,678	3,122	4,514	6,620	23,715	6,537	6,349	2,370	3,141	573	2,360
Behera	3,199	330	1,119	2	40,259	216	4,198	1,223	1,818	2,839	18,965	4,714	2,347	986	2,736	503	2,130
Gharbia	5,331	616	976	12	45,023	117	5,777	4,217	5,648	8,540	31,100	21,321	17,175	478	2,239	1,055	4,136
Fouadia	3,160	275	821	1	31,075	39	2,283	1,401	2,154	2,344	15,240	6,258	5,461	405	960	396	1,821
Dakahlia	7,637	1,064	1,973	10	59,324	170	6,294	2,694	5,801	5,837	44,130	12,946	8,465	802	3,424	1,052	3,789
Sharkia	4,654	776	1,169	7	36,948	7	3,695	1,035	2,967	3,889	24,785	6,269	2,841	682	808	137	1,209
Giza	5,546	773	1,102	29	62,321	—	4,326	1,598	3,811	4,727	25,867	5,423	4,015	12	1,128	535	2,228
Beni Suef	2,248	511	291	6	20,605	—	1,565	695	2,095	2,133	13,161	2,489	1,860	35	71	393	1,487
Fayoum	2,159	304	299	5	15,795	17	1,828	914	981	1,528	12,448	1,226	1,656	589	441	294	1,555
Minia	2,812	528	114	16	29,144	56	2,433	9,941	3,172	2,843	17,119	9,914	7,010	186	577	371	2,366
Assiut	3,560	1,043	1,687	284	11,583	19	2,036	1,261	1,225	2,550	20,251	2,685	1,357	137	207	503	784
Gerga	1,154	237	562	1	7,025	—	1,142	401	1,100	702	6,703	1,575	1,184	236	239	114	1,077
Qena	540	76	162	—	879	—	372	—	164	144	3,300	197	72	—	—	—	—
Aswan	178	12	96	9	5,585	2	162	103	95	80	1,138	733	192	28	180	79	297
TOTAL	51,812	7,413	12,487	429	468,984	1,186	42,726	22,119	39,964	50,659	290,241	88,413	67,154	8,962	19,688	6,601	28,644
RATE	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

Chapter VI—Quarantine

Since last war, the Quarantine Administration's work has been continuously increasing, in view of the increased volume of maritime and aerial navigation.

As provided for in Article 48 of the Quarantine Regulations, all vessels arriving at Egyptian ports must, before communicating with the shore, be medically inspected (Reconnaissance).

Vessels arriving from infected ports are subjected to a detailed medical inspection (Arraisionement).

The Quarantine Administration also takes the necessary measures to control aircraft and passengers arriving from abroad to prevent the penetration of any quarantinable or infectious diseases. The measures taken and restrictions imposed on infected areas in foreign countries are carried out by this administration in the light of notifications reported in the bulletins arriving regularly from the Regional Office for the Eastern Mediterranean, Singapore, Washington and Geneva stations.

All decisions taken by the direction of the administration concerning the infected localities are duly notified to the above stations as well as all authorities concerned.

As regards Egyptian Ports, no cases of infectious diseases were reported, this year, other than one case of smallpox at Suez and four cases of typhus at Alexandria, and consequently no measures were taken by foreign countries against passengers and Egyptian exports.

The following tables show the details of quarantine works during the year 1951 :

(1) Quarantinable diseases reported in the Egyptian ports during 1951 (Table No. 31).

(2) List of localities declared infected during the year by the Quarantine Authorities (Table No. 32).

(3) List of localities declared clean during the year by the Quarantine Authorities (Table No. 33).

(4) Number of vessels subjected to simple medical inspection (Table No. 34).

(5) Number of vessels subjected to detailed medical inspection (Table No. 35).

(6) Cases of diseases found on vessels on arrival at Egyptian ports (Table No. 36).

(7) Vaccinations carried out on board vessels in Egyptian ports (Table No. 37).

(8) Control of passengers (Table No. 38).

(9) (a) Aircraft dealt with during 1951.

(b) Passengers landing and departing by aircraft during 1951 (Table No. 39).

(10) Anti plague work (Table No. 40).

(a) Number of rats and soory caught, destroyed, and examined in the ports.

(b) Number of rats and soory caught, destroyed, and examined on vessels.

(11) Fleas found on rats caught (Table No. 41).

(12) Vessels deratised or exempted (Table No. 42).

(13) Disinfection by chemical means (Table No. 43).

(14) Control of water distribution to vessels in ports (Table No. 44).

(15) Control of goods under Quarantine supervision (Table No. 45).

Attached herewith is a separate statement of the pilgrim season of the year 1951, and the measures taken at Tor lazaret.

**TABLE No. 31.—QUARANTINABLE DISEASES REPORTED IN THE EGYPTIAN PORTS
DURING THE YEAR 1951**

The sanitary situation in the ports was satisfactory throughout the year as it appears from the following table:

Port	Plague		Cholera		Small-pox		Typhus	
	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths
Alexandria	—	—	—	—	—	—	4	—
Port-Said	—	—	—	—	—	—	—	—
Suez	—	—	—	—	1	—	—	—
Cairo	—	—	—	—	—	—	—	—
Luxor	—	—	—	—	—	—	—	—

Other Ports: Tor, Abu Zenima, Safaga, Hurghada, Shellal, Kantara, Ras Ghareb, Rosetta, Abu Kir, Mersa Matruh, Sollum: NIL

TABLE No. 32.—LOCALITIES DECLARED INFECTED DURING THE YEAR 1951

Date	Disease	Name of locality
2- 2-1951	Small pox ...	<i>United Kingdom</i> : Brighton.
20- 2-1951	Plague	<i>U.S.A.</i> : Lee County.
6- 3-1951	Small pox ...	<i>Indonesia</i> : Banjawangi, Besuki.
21- 3-1951	„	<i>Burma</i> : Akyab, Rangoon.
29- 3-1951	Plague	<i>Union of South Africa</i> : Koppies.
31- 3-1951	Small pox ...	<i>Japan</i> : Kobe.
31- 3-1951	„	<i>Ceylon</i> : Uva Province.
31- 3-1951	Plague	<i>Tanganyika</i> : Lake Province.
9- 5-1951	Small pox ...	<i>Ceylon</i> : Wesern Province.
9- 5-1951	„	<i>Viet-Nm</i> : Hanoi.
9- 5-1951	Plague	<i>Union of South Africa</i> : Orange Free State (Municipal Area of, Kroonstadt).
16- 5-1951	Small pox ...	<i>Holland</i> : Tillburg.
16- 5-1951	Plague	<i>Indonesia</i> : Timbang, Bangkalan Regency (Madura Island).
17- 5-1951	Small pox ...	<i>Ceylon</i> : Central Province.
20- 5-1951	Typhus	<i>Federation of Malayo</i> : Whole Territory.
21- 6-1951	Small pox ...	<i>French Estab. in India</i> : Pondicherry Dept. and Karikal.
25- 7-1951	„	<i>Ceylon</i> : Pepiliyana (Western Prov.) Warakapola in Sabaragamuwai
25- 7-1951	„	<i>Viet-Nm</i> : Whole territory.
31- 7-1951	„	<i>Indonesia</i> : Makasar.
31- 7-1951	Plague	<i>U.S.A.</i> : Lincoln County in Washington State.
26- 8-1951	„	<i>Brazil</i> : Ceara & Pernambuco States.
26- 8-1951	„	<i>Yemen</i> : Whole Territory.
8- 9-1951	Small pox ...	<i>Ceylon</i> : Dualagala & Gampola.
8- 9-1951	Plague	<i>Venezuela</i> : Miranda State.
19- 9-1951	„	<i>Union of South Africa</i> : Cape Province (Berkley West District.).
19- 9-1951	Cholera	<i>French Estab. in India</i> : Yanon.
8-10-1951	Small pox ...	<i>Ceylon</i> : Gampaha (West. Province).
8-10-1951	Yellow Fever.	<i>Costa Rica</i> : (Cent. America).
16-10-1951	Small pox ...	<i>Cambodia</i> .
25-10-1951	Plague	<i>Union of South Africa</i> : Cape Province (Murraysburg).
10-12-1951	„	<i>Portuguese India</i> : Whole Territory.
15-12-1951	„	<i>Tanganyika</i> : Tanga Province.
15-12-1951	„	<i>Union of South Africa</i> : Orange Free State (Bothaville).
20-12-1951	„	<i>Ceylon</i> : Trincomalee & Valvettiturlia Dist.
30-12-1951	„	<i>Brazil</i> : Bahia State.

TABLE No. 33.—LOCALITIES DECLARED CLEAN FROM INFECTION DURING
THE YEAR 1951

Date	Disease	Name of Locality
20- 1-1951	Small pox ...	<i>Indonesia</i> : Samarinda, Borneo Island.
20- 1-1951	„ ...	<i>Syria</i> .
5- 2-1951	Plague ...	<i>Union of South Africa</i> : (Orange Free State), Bloemfontein, Dewetsdorp, Thaba N'chu and Luck-off Dist. (Transvaal) Roodport — Johannesburg and Krugersdorp districts. (Cape Province) Lady Gray, Aliwal North, Queenstown and Sterks-troom districts.
6- 3-1951	Plague ...	<i>Kenya</i> : Bassoutoland, Mobassa, Nairobi (Rift Valley Province).
6- 3-1951	„ ...	<i>French West Africa</i> : Dakar.
6- 3-1951	„ ...	<i>South West Africa</i> : Whole territory.
6- 3-1951	„ ...	<i>Northern Rhodesia</i> : Baraotse Province.
6- 3-1951	„ ...	<i>Tanganyika</i> : Whole Territory.
6- 3-1951	„ ...	<i>Tunisia</i> : Tunis.
6- 3-1951	„ ...	<i>Uganda</i> : Kampala region.
6- 3-1951	„ ...	<i>Corsica</i> .
6- 3-1951	„ ...	<i>Azores Islands</i> .
6- 3-1951	„ ...	<i>Hawaii Islands</i> : Makawa District (Maui Island).
6- 3-1951	„ ...	<i>U.S.A.</i> : Arizona State, Oklahoma State : (Texas county), Kansas State (Rawlines county), Washington State : (Kittitas county, Lincoln county, Douglas County, Grant county).
6- 3-1951	„ ...	<i>Peru</i> : Lambayeque Dept. (Monsefu, Chiclayo Prov. Trujillo District, La Libertad Province) Piura Dept. : Ayabaca Province ; Cajamarca Dept. : Chota Province ; Huancabamba Province.
6- 3-1951	Cholera ...	<i>French Estab. in India</i> : Chandernagor.
6- 3-1951	Small pox ...	<i>Uganda</i> : Whole country.
6- 3-1951	Typhus ...	<i>Sierra Leone</i> : Whole country.
6- 3-1951	„ ...	<i>Colombia</i> : Whole country.
16- 4-1951	Small pox ...	<i>Japan</i> : Kobe.
27- 5-1951	„ ...	<i>Ceylon</i> : Uva Province.
20- 6-1951	„ ...	<i>Indonesia</i> : Java (Panarukan, Pasuruan) ; Sumatra (Tapanocli Area, Palembang Res. Medan Sibolga).
20- 6-1951	„ ...	<i>Ceylon</i> : Central Province.
20- 6-1951	„ ...	<i>Argentina</i> : Whole Territory.
20- 6-1951	„ ...	<i>Thailand</i> : Bangkok.
20- 6-1951	„ ...	<i>Colombia</i> : Whole Territory.
20- 6-1951	„ ...	<i>Mexico</i> : Whole territory.
20- 6-1951	„ ...	<i>Peru</i> : Whole territory.
20- 6-1951	„ ...	<i>Chili</i> : Whole territory.
20- 6-1951	Plague ...	<i>Pakistan</i> : Whole Territory.
20- 6-1951	„ ...	<i>Union of South Africa</i> : Cape Province (Beaufort) West. District. Orange Free State (Faursmith District).
20- 6-1951	„ ...	<i>Brazil</i> : Bahia State, Ceara State, Pernambuco State.
20- 6-1951	„ ...	<i>Peru</i> : Lima Province, Chancy District.
20- 6-1951	Cholera ...	<i>Portuguese India</i> : Whole territory.
20- 6-1951	Typhus ...	<i>Peru</i> : Whole territory.
14- 7-1951	Plague ...	<i>Union of South Africa</i> : Orange Free State (Municipal Area of, Kroonstad).
25- 7-1951	Small pox ...	<i>Holland</i> : Tillburg.
5- 8-1951	Plague ...	<i>Union of South Africa</i> : Orange Free State, (Koppies District).
16- 8-1951	Small pox ...	<i>Indonesia</i> : Warakapola in Sabaragamawa & Papeliana in Western Province.
29- 8-1951	Typhus ...	<i>Federation of Malaya</i>
8-10-1951	Plague ...	<i>Union of South Africa</i> : Cathcart.
8-10-1951	Small pox ...	<i>Union of South Africa</i> : Gampola.
31-10-1951	Plague ...	<i>Union of South Africa</i> : Berkley West District (Cape Province).
31-10-1951	„ ...	<i>Yemen</i> .
31-10-1951	Small pox ...	<i>Ceylon</i> : Talatuoya, Daulagala.
10-12-1951	Plague ...	<i>Brazil</i> : Alagoas, Ceara and Pernambuco States.

TABLE NO. 34.— STATEMENT OF ALL SHIPS ARRIVING DURING THE YEAR 1951
SIMPLE MEDICAL INSPECTION

Port	Cargo	Passenger vessels	Passenger and cargo	Sailing Vessels and Launches	Tankers	Various	TOTAL
Alexandria	946	369	96	184	5	—	1,600
Port Said	3,178	486	—	510	3179	291	7,644
Suez... ..	519	21	49	463	520	2	1,574
Tor	—	—	5	177	—	—	182
Kosseir	16	—	—	121	5	—	142
Damietta	—	—	—	159	—	—	159
Rosetta	—	—	—	86	—	—	86
Hurghada	11	—	—	24	23	—	58
Safaga	17	—	—	35	—	—	52
Kantara	—	—	—	—	—	—	—
Sollum	—	—	—	—	—	—	—
Ismailia	—	—	—	—	—	—	—
Abu Zenima	14	—	—	102	—	—	116
Mersa Matruh	—	—	—	8	—	—	8
Râs Ghareb	95	—	199	10	—	—	304
Abukir	—	—	—	12	—	—	12
Borollos	—	—	—	1	—	—	1
Shellal	95	173	81	547	—	—	595

TABLE NO. 35.—STATEMENT OF ALL SHIPS ARRIVING DURING THE YEAR 1951
DETAILED MEDICAL INSPECTION

Port	Cargo	Passenger vessels	Passenger and cargo	Sailing Vessels and Launches	Tankers	Various	TOTAL
Alexandria	752	109	—	78	22	—	961
Port Said	1,812	389	—	102	2,304	173	4,740
Suez... ..	1,889	266	494	122	3,062	89	5,922
Tor	—	—	4	35	—	—	39
Kosseir	43	—	—	5	—	—	48
Damietta	—	—	—	5	—	—	5
Rosetta	—	—	—	—	—	—	—
Hurghada	1	37	—	—	—	—	38
Safaga	8	—	—	14	—	—	22
Kantara	—	—	—	—	—	—	—
Sollum	—	—	—	—	—	—	—
Ismailia	—	—	—	—	—	—	—
Abu Zenima	15	—	—	—	—	—	15
Mersa Matruh	—	—	—	—	—	—	—
Ras Ghareb	1	—	—	—	—	—	1

TABLE No. 36.—QUARANTINABLE AND INFECTIOUS DISEASES FOUND ON
BOARD VESSELS

Alexandria Nil.

Port Said (a) Quarantinable Diseases : One case of small pox isolated.

(b) Infectious diseases : 32 cases on 22 vessels including the following diseases :

- 1 Chicken Pox
- 1 Malaria
- 5 Pneumonia
- 7 Tuberculosis of Lungs
- 2 Typhoid
- 1 Influenza
- 1 Cerebro Spinal fever
- 1 Dysentery
- 4 Bronchitis
- 1 Tonsilitis
- 1 Colitis
- 1 Colic
- 1 Hernia
- 1 Gastritis
- 1 Abscess
- 1 Uremia
- 1 Senility
- 1 Enteritis

32 TOTAL

Suez (a) Quarantinable Diseases : One case of small pox isolated from the vessel "Pasteni"

(b) Infectious Diseases : 839 cases on 118 vessels, including the following diseases :

- 94 Dysentery
- 176 Malaria
- 17 Influenza
- 49 Measles
- 221 T.B. of Lungs
- 180 Tuberculosis
- 23 Chicken pox
- 11 Mumps
- 18 Typhoid
- 19 Pneumonia
- 1 Meningitis
- 5 Leprosy
- 7 Jaundice
- 2 Pleurisy
- 3 Whooping Cough
- 1 Poliomyelitis
- 2 Diphtheria
- 2 Scarlet Fever
- 8 Tonsilitis

839 TOTAL

TABLE NO. 37.—VACCINATION CARRIED OUT ON BOARD VESSELS

Suez :

5 Passengers arriving on the vessel "Helini" from Port Sudan, were vaccinated against Smallpox.

4081 Passengers and crews on the vessel "Pasteni" from Colombo, were vaccinated against smallpox. (One case of suspected smallpox was isolated).

4086 TOTAL

TABLE NO. 38.—CONTROL OF PASSENGERS

Port	I and II Class	III and IV Class	TOTAL
A. (LANDING)			
Alexandria	21,455	16,330	37,785
Port Said	13,760	37,373	51,133
Suez	3,781	2,839	6,620
Tor	—	28,057 ⁽¹⁾	28,057 ⁽¹⁾
Kantara	2,760 ⁽³⁾	1,050 ⁽²⁾	3,810
Ras Ghareb	659	576	1,235
Shellal	—	23,332	23,332
B. (EMBARKING)			
Alexandria	18,398	14,181	32,579
Port-Said	17,682	26,387	44,069
Suez	1,241	3,073	4,314
Kantara	4,282 ⁽³⁾	—	2,482
Tor	—	28,040	28,040 ⁽¹⁾
Ras Ghareb	473	539	1,012
Shellal	—	17,642	17,642
Damietta	—	5	5

⁽¹⁾ Pilgrims

⁽²⁾ Caravans

⁽³⁾ By train

TABLE No. 39 : (A).—AIRCRAFT DEALT WITH DURING THE YEAR 1951

Name of Airport	Landing	Departing	Aircraft disin- sectised
CAIRO :			
Cairo	7,634	7,644	2,353
Almaza	1,946	1,968	401
Luxor	269	269	255
ALEXANDRIA :			
Alexandria	418	418	17
Mersa Matrouh	15	15	—
Port Said	68	59	6
Tor	—	—	—
Fayed	2,488	2,378	707

(B).—PASSENGERS LANDING AND DEPARTING BY AIRCRAFT DURING THE YEAR 1951

Name of Airport	Landing	Departing	Transit	Isolated	Remarks
Cairo	29,940	35,398	133,132	404	{ Not in possession of anti-cholera or anti-yellow fever certi- ficates. ditto
Almaza	16,885	21,138	3,049	81	
Luxor	252	111	3,241	8	
Alexandria	3,830	3,698	614	—	Not in possession of stool exa- mination and anti-yellow fever certificates
Mersa Matrouh	2	2	8	—	
Port Said	148	111	6	—	
Shellal	23,332	17,642	—	96	In possession of anti cholera certificates but incubation period not expired.
Fayed	261	1,847	1,041	—	

TABLE No. 40. —NUMBER OF RATS AND SOORY CAUGHT, DESTROYED AND
EXAMINED IN EGYPTIAN PORTS DURING 1951,

Number and species of rats caught										Alexandria	Port Said	Suez	
R. Norvegicus										Town	4,297	7,918	2,445
										Port	12	385	105
R. Rattus										Town	7,049	67	3
										Port	1,991	220	13
Acomys C.										Town	3,124	—	957
										Port	245	—	202
Soory										Town	—	1,244	917
										Port	—	1,620	802
TOTAL										16,718	11,454	5,444	

Rats Destroyed by Traps and Poison (Alexandria Port) :— 13,645

Rats found dead without using any means :	979	R. Norvegicus
	1,031	R. Rattus
	47	Acomys
	1,016	Soory

NUMBER OF RATS CAUGHT, DESTROYED AND EXAMINED ON VESSELS.

Number and species of rats caught				Alexandria	Port Said	Suez
1. Rats Trapped :						
R. Norvegicus				2	—	—
R. Rattus				279	—	—
2. Rats destroyed by (Traps and poison) :						
(a) Rats found dead after fumigation R. Rattus ...				399	—	51
(b) Rats found dead without using any means... ..				—	—	—
(c) Rats destroyed by hand				—	—	—

TABLE No. 41.—FLEAS FOUND ON RATS CAUGHT

Fleas found on :	Town		Port Area		TOTAL
	L.M.	X. Ch.	L.M.	X.Ch.	

A.—ALEXANDRIA											
R. Norvegicus	...	...	...	...	...	—	—	—	—	—
R. Rattus	...	...	...	...	...	...	450	884	50	34	1,634
Acomys	...	...	...	...	...	...	—	—	—	—	—

B.—PORT SAID											
R. Norvegicus	...	...	...	...	...	...	106	736	33	258	1,133
R. Rattus	...	...	...	...	...	...	5	163	13	177	358
Acomys	...	...	...	...	...	...	—	—	—	—	—

C.—SUEZ											
R. Norvegicus	...	...	...	...	...	...	—	—	—	—	—
R. Rattus	...	...	...	...	...	...	4	3946	—	—	3,950
Acomys	...	...	...	...	...	...	—	—	—	—	—

TABLE No. 42.

Port of	VESSELS			Process of deratization
	Steamers	Sailing	TOTAL	
(A) <i>Vessels Deratised or Exempted</i>				
Alexandria	5	—	5	Sulphur
Port-Saïd	1	—	1	
Suez	6	—	6	
(B) <i>Vessels deratized by The Near East Chemical Industries, Ltd., under the snpervision of the Quarantine Administration.</i>				
Alexandria	30	—	30	Cyanide
Port Saïd	—	—	—	
Suez	2	—	2	
(C) <i>Certificates of Exemption from Deratization issued.</i>				
Alexandria	48	18	66	
Port Saïd	73	41	114	
Suez	42	11	53	
Kossier	—	42	42	
Tor	—	43	43	
Damietta	—	32	32	

TABLE No. 43.—DISINFECTION BY CHEMICAL MEANS

	Alexandria	Port-Said	Sues	Shellal	Tor
Vessles disinfected	—	—	—	—	31
Barges and boats	137	—	246	—	—
Ships carrying animals	—	2	51	—	—
Cabins for animals	252	1	8	—	—
Number of stove fulls... ..	—	23	—	—	—
Cabins occupied by sick	—	1	5	—	—
Parcels disinfected without payment ...	—	11970,5 k	—	—	—
Water Tanks	58	—	190	—	—
Labour Disinfected	1915	—	—	—	—
Cabins of vessels... ..	192	—	—	—	—
Railway wagons	1	—	—	—	—
Yellow Fever Steamers	42	—	3,865	—	—
Decks disinfected... ..	25	—	—	—	—
Boxes for animals	26	—	—	—	—
Effects of vessels... ..	—	—	45	—	19
Quarantine Administration Effects... ..	—	—	120	—	87
Effects by weight... ..	—	—	35	—	—
Effects of passengers	—	—	1,096	—	—
Effects of porters... ..	—	—	169	—	—
Miscellaneous	—	—	1,357	—	81
Vessels with sick on board	—	—	2	—	—
Effects of pilgrims	—	—	—	—	330
Launches and sailing vessels with sick on board... ..	—	—	8	—	—

TABLE NO. 44.—CONTROL OF WATER DISTRIBUTION TO VESSELS IN PORTS

	Alexandria	Port-Said	Suez
Number of specimens taken from taps supplying the steamers	821	695	294
Number of specimens taken from taps supplying the water tanks	105	350	105

Results of Bacteriological Examination.

Specimens found fit for use :			
from taps supplying vessels	104	302	6
Specimens found unfit for use :			
from taps supplying vessels	61	393	108
Specimens found fit for use :			
from taps supplying water tanks... ..	760	192	131
Specimens found unfit for use :			
from taps supplying water tanks	1	156	163
Specimens found fit from taps... ..	—	—	98

PILGRIMAGE TO THE HEDJAZ

A notice published by the Quarantine Administration in the Official Journal, imposed as from July 11th, 1951, the usual sanitary provisions in respect of the control of pilgrims transiting Egyptian territory on their way to the Hedjaz. These provisions do not differ from those enforced in previous years, and provide for the vaccination of unprotected or insufficiently protected pilgrims, their surveillance, etc.

Measures for the control of returning pilgrims, as published in the Official Journal of 6th August 1951, were instituted after the completion of religious ceremonies and remained in force until the closure of Tor Camp and at the same time of the pilgrim season, on 27th October 1951.

OUTWARD JOURNEY.

A.—*Egyptian Pilgrims.*

Owing to rumours circulating about suspected cases of cholera in the Arabian Peninsula, the departure of Egyptian pilgrims was postponed until 17th August 1951, when it was ascertained that no case had been reported.

Vaccinations and Inoculations: Pilgrims were subjected, before departure, to inoculation against cholera and typhoid, and to vaccination against smallpox.

Transport of Pilgrims: The transport of Egyptian pilgrims to and from the Hedjaz was carried out by the "Misr Co. for Maritime Navigation" which assigned for this purpose the vessels "Misr" and "Sudan" and chartered the S.S. "Jehangir" and "Jaladurga" for the outward journey to Jeddah. The S.S. "Taif", "Talodi" and "Saqqara" belonging to the Khedivial Mail Company carried foreign pilgrims.

All these vessels were inspected by the Suez Quarantine Authorities and measured before being allowed to embark pilgrims; and after having ascertained that the accommodation and installations as laid down in the International Sanitary Convention of 1926 were existent, they were issued with certificates of measurement as follows:

TABLE No. 46

Name of Vessel							Date	Class I	Class II	Twindecks
Talodi,	Suez	...	...	...	...	...	23 August 1951	26	20	603
Sudan	„	...	...	...	...	...	16 „	58	117	1235
Misr	„	...	...	...	...	...	16 „	54	117	1235
Jehangir	„	...	...	...	...	...	29 „	18	—	981
Taif	„	...	...	...	...	...	4 September 51	24	20	603
Jaladurga	„	...	...	...	...	...	2 „	14	32	1320
Saqqara	„	...	...	...	...	...	5 „	22	—	343

A total of 18,346 Egyptian pilgrims left Suez for Jeddah during the period from 17th August to 17th September 1951, as against 23,283 pilgrims during the previous pilgrim season.

B.—*Foreign Pilgrims.*

Foreign pilgrims, who transit Egyptian territory on their way to the Hedjaz, generally consist of:

- (i) Those arriving at Port-Said on board pilgrim ships bound for Jeddah in transit through the Canal;
- (ii) Pilgrims arriving by train from Libya at Sollum, thence to Alexandria, and Suez for embarkation for Jeddah;
- (iii) Pilgrims arriving at Port-Said and Alexandria on ordinary vessels, thence proceed to Suez by land to embark for Jeddah.
- (iv) Pilgrims arriving through Kantara from the East and North East.

(i) *Pilgrim ships transiting through the Canal.*—6 pilgrim ships carrying 4,426 pilgrims arrived at Port-Said to proceed to Jeddah via the canal (as against 16 vessels carrying 10,036 pilgrims during the preceding pilgrim season) ; details of these steamers are :

TABLE No. 47

Name of Steamer	Date of arrival	Port of Departure	Net Tonnage	No. of Pilgrims
Izmir	24 August 1951	Lattaquia, Istambul...	3,021	1,081
Blue Star	25 „ ...	Tangiers, Ceuta ...	688	294
Providence	2 September ...	{ Casablanca, Algiers } { Tunis }	6,693	1,318
El Rawdah	2 „ ...	Algiers	2,157	721
Eleni	3 „ ...	Tripoli, Benghazi ...	2,227	313
Charlton Sovereign	4 „ ...	{ Oran, Algiers, Bona } { Tunis }	1,677	699
TOTAL				4,426

The nationalities of the pilgrims on board were:—Afghani 1, Algerians 1,382, Saudis 2, Lebanese 2, Moroccans 1,051, Senegalese 333, Syrians 1,033, Tripolitans 262, Tunisians 266, Turks 43, Lybians 51.

All these vessels and the pilgrims on board were inspected on arrival at Port-Said. The measurements and sanitary installations were checked and some infringements were found :

(ii) *Pilgrims arriving by land route from the West.*—734 pilgrims arrived at Sollum from the West on their way to the Hedjaz during the period 12th August – 2nd September 1951 by bus and private cars.

(iii) *Pilgrims arriving at Alexandria by sea.*—No pilgrims landed at Alexandria on ordinary vessels during the pilgrim season.

(iv) 5 pilgrims arrived at Kantara by the Palestine Railway.—4 of these who were not vaccinated, were vaccinated against cholera and smallpox.

DEPARTURE OF PILGRIMS FROM SUEZ

A total of 19,788 pilgrims left Suez for Jeddah on board 20 vessels during the period 14th August – 7th September 1951 as compared with 24,193 pilgrims during the last pilgrim season.

TABLE NO. 48.—DETAILS OF STEAMERS

Name of Steamer	Net Tonnage	Date of departure	Number of Pilgrims		
			Egyptians	Foreigners	TOTAL
Saqqara	1,613	14 August 1951	—	29	29
Sudan	5,029	17 „ ...	1,375	—	1,375
Misr	5,050	18 „ ...	1,393	—	1,393
Taif	784	19 „ ...	—	26	26
Zamalek	929	21 „ ...	—	15	15
Sudan	5,029	21 „ ...	1,410	—	1,410
Misr	5,050	22 „ ...	1,406	—	1,406
Sudan	5,029	25 „ ...	1,410	—	1,410
Misr	5,050	27 „ ...	1,406	—	1,406
Jehangir	2,057	29 „ ...	999	—	999
Sudan	5,029	30 „ ...	1,410	—	1,410
Misr	5,050	31 „ ...	1,310	—	1,310
Jaladurga	3,958	2 September...	1,249	—	1,249
Sudan	5,029	3 „ ...	1,236	—	1,236
Wai Heng	1,218	3 „ ...	—	681	681
Jehangir	2,057	4 „ ...	999	—	999
Taif	770	4 „ ...	20	523	543
Misr	5,050	5 „ ...	1,404	—	1,404
Saqqara	1,613	5 „ ...	30	151	181
Sudan	5,029	7 „ ...	1,305	1	1,306
TOTAL			18,362	1,426	19,788

The nationalities of the 1,426 foreigners were as follows :

Afghani	1
Algerian	362
Gold Coast	2
Saudis	22
Indians	2
Lebanese	4
Moroccans	630
Spanish	13
Palestinians	4
Jordanians	3
Tripolitans	25
Tunisians	348
French Somali	1
Nigerians	5
Pakistanis	4

TOTAL 1,426

BY AIR ROUTE

During the period 21st. August - 9th. September 1951, 69 aircrafts carried 2,148 pilgrims from Cairo aerodromes to the Hedjaz. The nationalities of these pilgrims were as follows: Egyptians 1,988, Algerians 41, Saudis 81, Moroccans 23, Tunisians 7, Iraki 1, Pakistanis 2, South African 1, Americans 2, Indian 1, Philippino 1.

RETURN JOURNEY

Arafat Day (9 Zilhidge) fell on September 11, 1951. The first returning pilgrims arrived at Tor on 17th. September 1951. These were 159 pilgrims landed from four aircrafts. These were followed by five aircrafts on 19th. September, which landed 198 pilgrims. On the next day, i.e. 20th. September 1951, the first pilgrim ship, the S.S. "Providence" arrived at Tor carrying 1,353 Egyptians. The last pilgrims who left the camp were 746 pilgrims on the S.S. "Misr" on 26th. October 1951. The camp closed and the pilgrim season ended on 28th. October 1951. The season thus lasted 41 days.

During that period, 25 steamers carrying 25,432 pilgrims, and 81 aircrafts carrying 2,625 pilgrims, called at Tor, thus making a total of 28,057 pilgrims (as against 36,041 pilgrims during the last pilgrim season) consisting of 21,932 Egyptians and 6,125 foreigners.

From this number, 4,516 foreigners arrived on 7 vessels which were authorised to continue their voyage through the Suez Canal in quarantine, after a medical inspection had been carried out at the camp. The remaining pilgrims underwent a period of observation at the lazaret. This period lasted three days for pilgrims arriving on the first two vessels and about five days for pilgrims arriving on the first 14 aircrafts.

Subsequently, pilgrims arriving by sea were held under observation for 48 hours and those arriving by air, for three days.

Sanitary condition: No case of cholera or plague having been reported at the Hedjaz, and stool examination of the 2,248 pilgrims and 270 crew of the first two vessels arriving at Tor, and of the 522 pilgrims arriving in the first aircrafts having given negative results, and because clinical examination of the pilgrims proved satisfactory, the Egyptian Health Authority decided on 24th. September 1951 to apply the provisions of article 142 of the 1926 Convention to Tor Lazaret

TABLE NO. 49.—DETAILS OF STEAMERS WHICH LANDED PILGRIMS AT TOR STATION.

Name of Vessel	Net Tonnage	Date of Arrival 1951	Date of Departure 1951	Destination	Number of Pilgrims		
					Egypt.	Foreigners	TOTAL
Providence	6,693	20 Sept.	23 Sept.	Suez	1,352	1	1,353
Sudan I	5,029	22 „	23 „	„	1,401	—	1,401
Misr I	5,051	24 „	27 „	„	1,385	—	1,385
Sudan II	5,029	26 „	28 „	„	1,400	—	1,400
Akbar I	2,441	28 „	30 „	„	1,371	—	1,371
Misr II	5,051	29 „	1 Oct.	„	1,420	1	1,421
Alawi I	2,160	1 Oct.	3 „	„	992	—	992
Akbar II	2,441	4 „	6 „	„	1,380	1	1,381
Sudan III	5,029	5 „	7 „	„	1,408	—	1,408
Talodi	784	7 „	9 „	„	263	297	560
Misr III	5,051	7 „	9 „	„	1,416	1	1,417
Misr IV	5,051	11 „	13 „	„	1,407	3	1,410
Sudan IV	5,029	15 „	17 „	„	1,383	—	1,383
Misr V	5,051	18 „	20 „	„	1,226	3	1,229
Taif	784	18 „	20 „	„	148	254	402
Zamalik	929	6 „	8 „	„	—	428	428
Sudan V	5,029	22 „	24 „	„	1,210	19	1,229
Misr VI	5,051	26 „	28 „	„	708	38	746
TOTAL					19,870	1,046	20,916

TABLE NO. 50.—DETAILS OF STEAMERS WHICH TRANSITED THE CANAL

Name of Steamer	Net Tonnage	Date of Arrival 1951	Date of Departure 1951	Desti- nation	Number of Foreign Pilgrims
Charlton Sovereign	1,677	30 Sept.	30 Sept.	Algiers	711
Roda	2,157	2 Oct.	3 Oct.	„	704
Izmir	3,021	2 „	2 „	Lattakia	1,088
Providence	6,693	2 „	2 „	Algiers	1,345
Eleni	2,227	5 „	5 „	Tripoli	340
Tewfik	354	12 „	12 „	Beirout	7
Blue Star	688	13 „	13 „	Tangiers	321
TOTAL					4,516

TABLE No. 51.—DETAILS OF AIRCRAFTS WHICH LANDED PILGRIMS
AT TOR STATION

Aircraft No.	Date of Arrival	Date of Departure	Destination	Number of Pilgrims		
				Egyptians	Foreigners	TOTAL
4	1951 17 Sept.	1951 22 Sept.	Cairo	149	10	159
5	19 "	24 "	"	185	13	198
5	21 "	25 "	"	146	20	165
6	23 "	26 "	"	193	9	202
6	24 "	27 "	"	193	14	207
6	25 "	28 "	"	174	23	197
8	26 "	29 "	"	180	75	255
7	27 "	30 "	"	202	24	226
7	28 "	1 Oct.	"	210	12	222
10	29 "	2 "	"	282	33	315
3	30 "	3 "	"	62	45	107
1	1 Oct.	4 "	"	8	15	23
1	2 "	5 "	"	12	13	25
1	3 "	6 "	"	2	27	29
1	5 "	8 "	"	4	17	21
2	6 "	9 "	"	10	67	77
1	9 "	12 "	"	13	12	25
1	11 "	14 "	"	5	31	36
1	15 "	16 "	"	9	30	39
1	15 "	18 "	"	3	6	9
1	17 "	20 "	"	9	4	13
1	20 "	23 "	"	2	8	10
1	22 "	25 "	"	—	34	34
1	24 "	27 "	"	9	11	20
81	Aircrafts		TOTAL	2,062	553	2,615

TABLE NO. 52.—COMPARATIVE STATEMENT OF PILGRIMS LANDED
AT TOR DURING THE LAST THREE PILGRIM SEASONS

Nationalities	1949 A. D. 1368 Heg.	1950 A. D. 1369 Heg.	1951 A. D. 1370 Heg.
Egyptians	18,983	25,341	21,932
Afghanis	39	16	3
Algerians	517	869	1,983
Chinese	2	1	—
British	46	8	3
Cypriots	2	—	—
Cyrenaica	—	6	8
French	1	—	26
Ceylonees	—	3	—
Indians	171	114	119
Iranians	360	133	—
Irakis	503	442	5
Indonesians	19	9	3
Lebanese	473	354	1
Greeks	—	13	13
Moroccans	525	1,012	1,133
Palestinians	59	21	2
Pakistanis	20	99	70
Senegalese	300	329	370
Syrians	1,826	1,905	1,066
Transjordanians... ..	4	15	2
Tripolitans	198	297	351
Tunisians	213	374	582
Turks	4,066	4,389	38
Saudis... ..	157	223	300
South Africans	11	10	13
Miscellaneous	17	58	34
TOTAL	28,512	36,041	28,057

HOSPITAL ADMISSIONS

A total of 117 persons were admitted to the hospital, including 15 pilgrims from aircrafts, 81 pilgrims from vessels and 21 non pilgrims (Officials and workmen).

This number includes

- 89 Egyptians.
- 4 Algerians.
- 2 Pakistanis
- 1 Tunisian.

Nature of diseases :

Appendicitis, acute	...	...	...	...	...	...	...	...	...	...	...	...	1
Dysentery, acute	...	...	...	...	...	...	...	...	...	...	...	...	1
Dysentery amoebic	...	...	...	...	...	...	...	...	...	...	...	...	2
Paratyphoid with broncho-pneumonia	...	...	...	...	...	...	...	...	...	...	...	...	1
Constipation	...	...	...	...	...	...	...	...	...	...	...	...	1
Colics	...	...	...	...	...	...	...	...	...	...	...	...	2
Chronic Colitis	...	...	...	...	...	...	...	...	...	...	...	...	1
Colitis, acute	...	...	...	...	...	...	...	...	...	...	...	...	1
Bronchitis, acute	...	...	...	...	...	...	...	...	...	...	...	...	5
Enteritis	...	...	...	...	...	...	...	...	...	...	...	...	5
Bronchitis, Chronic	...	...	...	...	...	...	...	...	...	...	...	...	2
Bronchitis with laryngitis	...	...	...	...	...	...	...	...	...	...	...	...	1
Influenza	...	...	...	...	...	...	...	...	...	...	...	...	8
Pneumonia	...	...	...	...	...	...	...	...	...	...	...	...	9
Broncho-pneumonia	...	...	...	...	...	...	...	...	...	...	...	...	2
General debility	...	...	...	...	...	...	...	...	...	...	...	...	9
Debility after miscarriage	...	...	...	...	...	...	...	...	...	...	...	...	1
Senility	...	...	...	...	...	...	...	...	...	...	...	...	10
Sun Stroke	...	...	...	...	...	...	...	...	...	...	...	...	3
General debility, senility and abscess	...	...	...	...	...	...	...	...	...	...	...	...	1
Urticaria	...	...	...	...	...	...	...	...	...	...	...	...	1
Abscesses	...	...	...	...	...	...	...	...	...	...	...	...	7
Scabies, septic	...	...	...	...	...	...	...	...	...	...	...	...	2
Hemiplegia	...	...	...	...	...	...	...	...	...	...	...	...	2
Septic wounds	...	...	...	...	...	...	...	...	...	...	...	...	1
Trachoma	...	...	...	...	...	...	...	...	...	...	...	...	1
Dropsy	...	...	...	...	...	...	...	...	...	...	...	...	1
Erysipelas	...	...	...	...	...	...	...	...	...	...	...	...	8
Prostatitis with retention of urine	...	...	...	...	...	...	...	...	...	...	...	...	2
Cerebral hemorrhage	...	...	...	...	...	...	...	...	...	...	...	...	1
Diabetes with abscess	...	...	...	...	...	...	...	...	...	...	...	...	1
Ulcers	...	...	...	...	...	...	...	...	...	...	...	...	5
Renal Colics	...	...	...	...	...	...	...	...	...	...	...	...	3
Heart Failure with chronic asthma	...	...	...	...	...	...	...	...	...	...	...	...	1
Fractures	...	...	...	...	...	...	...	...	...	...	...	...	4
Cellulitis	...	...	...	...	...	...	...	...	...	...	...	...	4
High blood pressure	...	...	...	...	...	...	...	...	...	...	...	...	1
Uraemia with syncope	...	...	...	...	...	...	...	...	...	...	...	...	1
Senility with uraemia	...	...	...	...	...	...	...	...	...	...	...	...	1
Tuberculosis	...	...	...	...	...	...	...	...	...	...	...	...	1
Hydrocele	...	...	...	...	...	...	...	...	...	...	...	...	1
Hemorrhage before Labour	...	...	...	...	...	...	...	...	...	...	...	...	1
Relative accompanying patient	...	...	...	...	...	...	...	...	...	...	...	...	1

TOTAL 117

Deaths : 7 deaths occurred during the season, including :
 4 pilgrims. (2 males and 2 females) arrived by vessels.
 3 Pilgrims. (all males) arrived by aircrafts.

The causes of deaths were :

- 1 Female, Uremia and collapse.
- 1 Male, Heart failure with chronic Asthma.
- 1 Female, Dropsy.
- 1 Male, Uremia, Senility and General Debility.
- 1 Male, Cerebral Hemorrhage resulting from high blood pressure and chronic renal colics.
- 1 Male, Broncho Pneumonia.
- 1 Male, Sun Stroke.

LABORATORY

Initially, bacteriological examination of the stools of all pilgrims and members of the crew who arrived on the first two vessels and the first 20 aircrafts, was carried out. 3,741 specimens were thus examined for cholera vibrio during the period 17-24 September 1951

As from that date, the proportion of stools examined was reduced to 50% and then gradually lowered, until for the last vessels 20% only were examined.

In this way, a total of 10,323 specimens were examined for *v. cholerae* : 41 specimens showed the presence of non agglutinating vibrios.

In addition to the above specimens, the laboratory carried out the examination of the following specimens :

- 4 Sputum for T.A.B., result : 3 negative, 1 positive.
- 10 Stools for Dysentery, result all negative.
- 7 Stools for Enterica, result all negative.
- 12 Urine for diabetes and albumin, result 3 positive for diabetes, 4 positive for albumin.
- 7 Blood for widal, Weil-Felix result 4 negative, 1 P. Bx 19 1/50, 1 PAx 19 1/50, 1 T.H. 1/125.
- 7 Blood specimens for malaria and relapsing fever, all negative.

Post Mortem.—One corpse was examined and found that the death was due to cerebral hemorrhage as a result of high blood pressure and nephritis.

Water Supply.—On September 25, 1951, specimens of water were taken from the three wells and 8 tanks. All specimens were found satisfactory. The results were as follows :

Lactose fermenters in 10 ccs.

2 present in one well.

1 " " "

1 " in each of 4 tanks

4 " " 2 "

Ordinary bacteria in 1 cc.

in the three wells : 25, 15 and 10 respectively.

in the 8 tanks : 20, 10, 14, 30, 10, 40, 15 and 20 respectively.

Chapter VII.—Permits

The permits department was instituted in 1946 within the Ministry of Social Affairs. It was affiliated to this Ministry in 1947 with a view to facilitating the procedure of granting permits to sanitary establishments by combining in one department all the authorities concerned with this work ; dispersal of these authorities among different departments having caused great delay in granting permits. Although only two of these authorities were combined, namely the Permits Office of the labour Department of the Ministry of Social Affairs and the Sanitation Office of this Ministry, much difficulties have been overcome and the time taken for issuing permits to unhealthy, inconvenient and dangerous establishments governed by law No. 13 of 1904 has been much reduced.

Most of the sanitary engineers of the Department have been posted to the provinces and governorates so that time may be saved in surveying establishments and prescribing the necessary sanitary conditions required. Only a small number has been kept in the central administration for supervision and control.

A large number of complaints is received by the department either from delay in granting the permits, difficult sanitary conditions imposed or against exploiting establishments without permits. Some of these complaints are investigated by the department. The rest are forwarded to the police or health offices for investigation and report.

During the year under review, 2,099 applications for new permits were received as against 2,058 applications in 1950.

1,254 permits were issued during the year as against 1,302 in 1950.

Chapter VIII.—State of Public Health in Cairo and Alexandria

Cairo City

Population :

The estimated mid-year population of Cairo City in 1951 was 2,326,222.

Births :

The total number of births (excluding still births) recorded during the year was 117,599 or 4,111 more births than the previous year and a birth rate of 50.55 per thousand of population.

Still births numbered 2,109 or a ratio of 17.93 per thousand births as against 2,000 still births in the previous year.

Deaths :

The number of deaths notified during the year was 53,924. This figure includes 1,573 deaths of non residents of Cairo City and 2,109 still births leaving 50,242 deaths proper for Cairo City or 1,570 more deaths than last year and a death rate of 21.59 per thousand of population.

Infantile Mortality :

The number of deaths of infants under one year of age was 20,079 or a ratio of 170.7 per thousand of live births as compared with 178.6 in the previous year.

The infantile deaths constituted 39.9 per cent of the total of Cairo deaths as compared with 41.6 in 1950.

Table No. 54 Gives the distribution of births, deaths and infantile deaths and ratios on the various Districts of Cairo.

Causes of Infantile Mortality :

Diarrhoea and enteritis still account for the greatest number of infantile deaths, namely 10,948 out of the total of 20,079 deaths or a ratio of 54.5 per cent. Congenital debility accounted for 5,864 deaths or 29.2%. Chest diseases accounted for 1,937 (exclusive of broncho and lobar pneumonia deaths) or 9.1%. 778 deaths or 3.3% were due to infectious diseases and 652 deaths or 3.2% from other causes.

Death Inquiries :

A total of 7,828 uncertified deaths or 14.5% of Cairo deaths were investigated by Cairo District Medical Officers and 22,051 or 40.89% by District Midwives.

Infectious Diseases :

A total of 18,511 cases of infectious diseases were reported during the year or a case rate of 7.95 per thousand of population as compared with 17,539 cases in 1950. 4,769 deaths from infectious diseases were recorded during the year or a ratio of 9.4% of Cairo deaths.

Table No. 56 gives the number of infectious diseases cases and deaths and their rates during the year :

Cholera and Relapsing Fever :

No cases or deaths from either cholera or relapsing fever were reported during the year ; nor during 1950 and 1949.

Small pox :

Two cases of small pox with no deaths were reported during the year. This is compared with one case in 1950, 2 cases in 1949 and one case in 1948 with no deaths.

Anti Small Pox Vaccination :

The practice of undertaking a house to house prophylactic vaccination in certain districts of the City has been abandoned. It has been decided to carry out the vaccination simultaneously in all the districts of the City. A total of 499,930 persons were vaccinated during the year as compared with 340,008 in 1950, 321,501 in 1949 and 552,074 in 1948.

Besides, district health offices undertook the compulsory vaccination of 110,855 new born infants.

Typhus :

34 cases of typhus with one death were reported during the year or a case rate of 0.014 per thousand of population as compared with 32 cases with two deaths in 1950.

Typhoid :

3,368 cases of typhoid with 268 deaths were recorded during the year or a ratio of 1.4 and 0.1 respectively per 1000 of population as compared with 3,711 cases with 359 deaths in 1950.

473,585 persons were inoculated once against typhoid and 294,549 twice.

Diphtheria :

554 cases with 131 deaths were recorded during the year or a ratio of 0.24 and 0.05 per thousand of population as compared with 530 cases with 117 deaths in 1950.

85,536 persons received the first anti-diphtheria injection, 83,050 received the second injection and 81,714 received the third.

Measles :

2,248 cases with 1,038 deaths were recorded during the year or a ratio of 0.9 and 0.4 respectively per 1,000 of population as compared with 585 with 230 deaths in the previous year.

Cerebro Spinal Fever :

274 cases with 35 deaths were recorded or a ratio of 0.1 and 0.01 per thousand of population as compared with 1,274 cases with 167 deaths during 1950.

Scarlet Fever :

45 cases of scarlet fever with no deaths were reported during the year as against 10 cases in the previous year.

Influenza :

2,896 cases with five deaths were recorded during the year or a ratio of 1.24 and 0.002 per thousand of population as against 2,777 cases with 9 deaths in 1950.

Tuberculosis :

Unlike previous years, cases of this disease have been recorded under two headings : pulmonary T.B. and T.B. of other organs. 2,567 cases with 1,291 deaths of the former and 339 cases with 170 deaths of the latter were recorded during the year or a total of 2,906 cases with 1,461 deaths and a ratio of 1.24 and 0.624 per thousand of population as against a total of 3,583 cases with 1,683 deaths in 1950.

Malaria :

347 cases of malaria (341 new infections and 6 relapses) with 2 deaths were recorded during the year as against 516 cases (507 new and 9 relapses) in the previous year.

Deaths attributed to Confinement :

66 deaths attributed to confinement were recorded this year or a ratio of 0.56 per thousand births as against 0.8 per 1000 births in the previous year.

Disinfection :

A total of 2,343,968 persons with their effects and beddings were dusted with D.D.T. and 46,985 rooms disinfected by Cairo disinfection stations.

SANITARY CONTROL

Passengers :

30,378 passengers arrived in Cairo City from infected countries as compared with 2,566 in 1950.

Of this number, 11,411 arrived by air, 209 arrived by car via Ismailia, 1,308 via Suez, 2,358 via Kantara, 511 arrived by sea via Alexandria and 533 via Port Said.

Besides, 13,848 passengers arriving from the Sudan via Shellal were observed for small pox, yellow fever, cerebro spinal and relapsing fevers.

All the passengers were observed for the regulation period and found in good health except 392 passengers or 1.29% of total arrivals who could not be traced.

Pilgrims :

3,240 Egyptian pilgrims arrived from the Hedjaz during the year as against 3,495 in 1950. All were observed for the regulation period and found in good health.

Deaths :

98 pilgrims died in the Hedjaz, 1 died after arrival, 1 died of dysentery and two of typhoid.

Besides, 109 pilgrims from other localities than Cairo City were observed and found in good health. Personnel of the medical mission and other staff numbering 111 were also observed and found in good health.

SANITATION

Sanitation activities include :

(1) Taking samples of water periodically from the different water works in Cairo, Helwan, Zeitoun, Heliopolis and Giza for analysis to ensure their potability ; also from water taps in the different districts and from swimming pools.

(2) Control and prosecution of quack doctors.

(3) Observation of street cleanliness and prosecution of offenders.

(4) Control of sewage disposal and prosecution of persons dumping sewage matter in unauthorised sites.

(5) Fencing and cleanliness of waste lands.

(6) Control of the evacuation of private cisterns. 2,000 permits were issued during the year.

(7) Dealing with complaints against insanitary practices, e.g. dumping filthy water in streets, overflow of cesspits, dirty houses, etc. Some 2,300 complaints were received and dealt with during the year.

(8) Supervision, maintenance and repair of 210 free water taps scattered throughout the City.

(9) Supervision of 8 water basins for washing and disinfecting fresh vegetables and fruits brought daily into the City.

(10) Compulsory evacuation of cisterns. 3,500 evacuations were carried out during the year.

During the year, 2,967 establishments of the three classes were licensed under law No. 13 of 1904 and 327 public establishments under law No. 38 of 1941.

Of 25,716 unhealthy establishments inspected during the year, 20,590 were found satisfactory and 5,126 lacked sanitary conditions.

Of 11,142 dangerous and inconvenient establishments inspected, 9,476 were satisfactory and 1,666 unsatisfactory.

Of 3,555 public establishments inspected, 3,011 were satisfactory and 544 unsatisfactory.

2,347 contraventions were served on establishments exploited without licences and 2,332 contraventions for lacking sanitary conditions.

Cairo City Police Health Office.

A total of 3,798 days' sick leave were granted to Cairo City Police personnel during the year.

POPULATION OF CAIRO CITY, 1951

Qism	Number
Qubba... ..	93,844
Heliopolis	92,195
Zeitoun	90,257
Abbassia	136,186
Ezbekia	110,053
Rod el Farag	189,957
Shubra	125,135
Sharabia	79,682
Gamalia	121,843
Bab el Shaaria	134,342
Abdin	94,996
Mouski	79,322
Darb el Ahmar... ..	117,100
Khalifa	127,922
Sayeda I	111,290
Sayeda II	101,072
Boulaq I	68,879
Boulaq II	77,361
Adawia	71,692
Old Cairo	113,581
Helwan	50,614
Maadi	46,584
Hadayeq Shubra	92,315
TOTAL	2,326,222

**TABLE No. 54.—VITAL STATISTIC OF CAIRO CITY 1951 DISTRIBUTED
ACCORDING TO QISMS.**

Cairo Districts (Qisms)	Population	Births	Birth rate per 1000 of population	Deaths	Death rate per 1,000 of population	Deaths below one year	Infantile death rate per 100 births
Qubba	93,844	5,281	56.2	2,226	23.7	977	18.5
Heliopolis	92,195	2,589	28.0	1,128	12.2	319	12.3
Zeitoun	90,257	5,526	61.2	2,422	26.8	998	18.0
Abbassia	136,186	7,346	53.9	2,318	17.0	729	9.9
Ezbekia	110,053	4,031	36.6	1,909	17.3	713	17.6
Rod el Farag ...	189,957	9,175	48.3	3,569	18.7	1,480	16.1
Hadayeq Shubra ...	92,315	6,178	66.9	2,385	25.8	1,098	17.7
Shubra	125,135	7,071	56.5	2,646	21.1	1,081	15.2
Sharabia	79,682	5,568	89.8	2,344	29.2	1,065	19.1
Gamalia	121,843	6,270	51.3	2,914	23.8	1,197	19.0
Bab el Shaaria ...	134,342	5,311	39.5	2,382	17.7	898	16.9
Abdin	94,996	3,741	39.3	1,593	16.7	490	13.0
Mouski	79,322	3,151	39.7	1,346	16.9	517	16.4
Darb el Ahmar ...	117,100	5,558	47.4	2,517	21.4	1,014	18.2
Khalifa	127,922	6,641	51.9	3,283	27.2	1,386	20.8
Sayeda I	111,290	6,732	60.4	2,744	24.6	1,019	15.1
Sayeda II	101,072	3,980	39.7	1,997	19.7	871	21.8
Boulaq I... ..	68,879	2,900	42.1	1,620	23.5	622	21.7
Boulaq II	77,361	3,767	48.6	1,629	21.5	669	17.7
Adawia	71,692	6,599	92.0	1,827	25.4	803	12.1
Old Cairo	113,581	6,408	56.4	3,012	26.5	1,256	19.6
Helwan	50,614	2,464	48.6	1,079	21.3	406	16.4
Maadi	46,584	2,312	49.6	1,352	29.0	471	20.3
TOTAL	2,326,222	117,599	50.5	50,242	21.5	20,079	17.0

TABLE No. 55.—DISTRIBUTION OF UNCERTIFIED DEATHS ON CAIRO DISTRICTS, 1951

Districts	Total Deaths	Deaths Examined by			
		Medical Officers	Midwives	Private Practitioners	Hospital Medical officers
Qubba... ..	1,995	252	667	1,076	—
Heliopolis	1,255	84	240	564	367
Zeitoun	2,296	299	1,398	556	43
Abbassia	3,940	149	502	1,280	2,009
Ezbekia	1,760	180	791	728	61
Rod el Farag	3,386	360	1,459	1,567	—
Hadayeq Shubra	2,364	162	1,089	1,069	44
Shubra	2,488	200	1,008	909	371
Sharabia	2,348	480	1,401	285	182
Gamalia	2,629	215	1,164	1,250	—
Bab el Shaaria	2,145	112	793	1,179	61
Abdine	1,268	274	661	313	20
Mouski	1,242	304	537	401	—
Darb el Ahmar	2,256	603	1,354	299	—
Khalifa	3,039	1,015	1,518	506	—
Sayeda I	6,017	381	1,216	417	4,003
Sayeda II	2,453	394	713	482	864
Boulaq I	1,422	290	812	315	5
Boulaq II	1,561	301	940	320	—
Adawia	2,725	465	1,179	121	960
Old Cairo	2,904	698	1,455	679	72
Helwan	1,128	147	566	296	119
Maadi	1,303	463	588	144	108
TOTAL	53,924	7,828	22,051	14,720	9,325
Rate per cent ...	—	14·5	40·8	27·2	17·2

TABLE NO. 56.—INFECTIOUS DISEASES CASES, DEATHS AND RATES PER 1,000 OF POPULATION

Diseases	Cases	Case Rates per 1,000 of population	Deaths	Death Rates per 1,000 of population	Case Mortality Rates per cent
Typhoid	3,368	1.44	268	0.11	7.9
Typhus	34	0.015	1	0.0004	2.9
Diphtheria	554	0.23	131	0.05	23.6
Chicken pox	2	0.0008	—	—	—
Small pox	776	0.33	3	0.001	0.38
Measles	2,248	0.96	1,038	0.44	46.17
Cerebro Spinal Fever	274	0.11	35	0.01	12.7
Scarlet fever	45	0.01	—	—	—
Whooping cough	350	0.15	19	0.008	5.4
Mumps	924	0.39	—	—	—
Rabies	5	0.002	5	0.002	100
Tetanus	84	0.03	32	0.01	38.09
Peurperal fever	186	0.07	23	0.009	12.3
Undulant fever	55	0.02	2	0.0008	3.6
Dysentery	222	0.09	82	0.03	36.9
Tuberculosis	2,567	1.1	1,291	0.55	50.2
Influenza	2,896	1.24	5	0.002	0.17
Erysipelas	451	0.19	8	0.003	1.7
Malaria New	341	0.14	1	0.0004	0.29
Malaria Recurrent	6	0.002	—	—	—
Broncho pneumonia	2,320	0.99	1,502	0.64	64.7
Lobar ,,	458	0.19	153	0.06	3.43
Poliomyelitis	6	0.003	—	—	—
T.B. of other Organs	339	0.14	170	0.07	50.1
TOTAL	18,511	7.95	4,763	2.05	25.76

TABLE No. 57.—DISTRICT DISTRIBUTION OF THE PRINCIPAL INFECTIOUS DISEASES 1951.

Qlams	Population	Small pox		C. S. fever		Typhus		Typhoid		Scarlet fever		Diphtheria		Measles		TOTAL	
		C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.	C.	D.
Qubba ...	93,844	—	—	15	5	2	—	169	9	2	—	37	8	89	13	314	35
Heliopolis ...	92,195	—	—	46	4	—	—	139	9	9	—	7	—	50	12	251	25
Zeitoun ...	90,257	—	—	11	—	2	—	93	6	6	—	15	4	104	59	231	69
Abbassia ...	136,186	—	—	46	7	3	—	273	21	6	—	63	19	161	18	252	65
Ezbekia ...	110,053	—	—	8	—	1	—	127	13	1	—	23	5	54	23	214	41
Rod el Farag ...	189,957	—	—	11	1	1	—	349	20	—	—	46	9	286	202	693	232
Hadayeq Shubra ...	92,315	—	—	8	—	3	1	189	9	—	—	22	6	75	40	297	56
Shubra ...	125,135	—	—	12	3	1	—	157	19	—	—	23	11	105	70	298	103
Sharabia... ..	79,682	—	—	9	2	3	—	142	12	—	—	22	3	204	91	382	108
Gamalia	121,483	—	—	18	2	1	—	297	21	1	—	32	6	94	16	443	45
Bab el Shaaria ...	134,342	—	—	6	2	1	—	212	22	1	—	29	10	99	20	348	54
Abdine	94,696	—	—	8	—	—	—	105	9	2	—	13	5	103	68	231	82
Mouski	79,322	—	—	8	—	1	—	75	5	—	—	18	2	57	39	159	46
Darb el Ahmar ...	117,100	1	—	10	1	2	—	156	15	—	—	36	8	56	13	261	37
Khalifa	127,922	—	—	16	—	1	—	178	18	—	—	23	6	100	49	318	73
Sayeda I	111,290	—	—	7	—	—	—	142	11	2	—	17	3	40	3	208	17
Sayeda II	101,072	1	—	5	—	—	—	111	9	1	—	25	5	59	26	202	40
Boulaq I	68,879	—	—	7	1	4	—	77	6	2	—	21	6	86	30	197	43
Boulaq II	77,361	—	—	2	2	—	—	104	11	—	—	16	3	105	28	227	44
Adawia	71,692	—	—	7	1	—	—	82	13	—	—	17	1	110	74	217	89
Old Cairo	113,581	—	—	6	3	5	—	109	4	4	—	31	6	202	142	357	155
Helwan	50,614	—	—	4	1	3	—	30	2	—	—	8	3	4	1	49	7
Maadi	46,584	—	—	4	—	—	—	52	4	5	—	10	2	5	1	76	7
TOTAL	2,326,222	2	—	274	35	34	1	3,368	268	45	—	554	131	2,248	1,038	6,225	1,473

Alexandria City

TABLE No. 58.—MONTHLY AGE AND SEX DISTRIBUTION OF BIRTHS AND DEATHS IN ALEXANDRIA DURING 1951

Month	Births				Deaths												TOTAL	
	Live		Still		Under 1 year		1-5 years		5-15 years		15-45 years		45-65 years		Over 65 years			
	Male	Female	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.		
January ...	2,638	2,457	49	34	401	352	257	259	27	18	80	49	125	68	173	168	1,063	914
February ...	2,542	2,367	45	31	292	291	243	255	21	20	75	47	96	55	112	112	839	780
March ...	2,583	2,587	57	44	404	370	294	317	24	18	68	74	121	58	113	124	1,027	961
April ...	2,126	1,946	57	33	407	400	254	286	15	18	84	61	99	60	132	132	991	957
May ...	2,095	1,974	63	33	420	382	276	294	30	25	86	66	119	69	133	117	1,064	953
June ...	2,060	1,882	52	35	444	427	232	248	19	15	85	56	89	59	112	130	981	945
July...	2,347	2,215	41	39	498	483	242	262	24	20	103	67	97	65	135	114	1,099	1,011
August ...	2,476	2,273	59	50	540	517	230	283	33	17	87	53	140	61	146	151	1,176	1,082
September ...	2,334	2,303	41	36	419	429	239	263	24	20	74	62	113	55	142	154	1,011	983
October ...	2,348	2,255	53	26	427	317	174	214	21	13	87	41	111	71	125	119	945	775
November ...	2,383	2,296	72	35	293	297	146	162	21	14	74	29	106	48	110	123	730	673
December ...	2,646	2,685	71	33	306	258	128	145	21	17	66	50	103	49	167	146	781	665
TOTAL ...	28,578	27,251	660	429	4,851	4,523	2,715	2,988	280	225	969	655	1,322	718	1,590	1,590	11,727	10,699

TABLE No. 59.—AGE AND SEX DISTRIBUTION OF INFECTIOUS DISEASES CASES AND DEATHS IN ALEXANDRIA DURING 1951

Disease	Sex	0-1 year		1-5 years		5-15 years		15-45 years		45-65 years		Over 65 years		Total	
		Case	Death	Case	Death	Case	Death	Case	Death	Case	Death	Case	Death	Case	Death
Typhus ...	{ M. F. }	—	—	—	—	—	—	1	—	—	—	—	—	1	—
Encephalitis ...	{ M. F. }	—	—	1	—	—	—	—	—	—	—	—	—	1	—
Puerperal Fever ...	{ M. F. }	—	—	2	—	—	—	—	—	—	—	—	—	3	1
Cerebro Spinal Fever	{ M. F. }	21 14	8 7	57 41	21 12	90 72	8 7	108 45	10 5	6	—	1	—	283 175	49 31
Scarlet Fever	{ M. F. }	—	—	17 12	—	39 20	—	9 3	—	—	—	—	—	69 36	—
Tetanus...	{ M. F. }	13 6	9 5	5 2	2 1	12 2	5 1	17 6	11 —	5	—	1	—	53 16	32 7
Undulant Fever ...	{ M. F. }	—	—	—	—	—	—	1	—	—	—	—	—	1 1	—
Whooping Cough	{ M. F. }	9 16	— 1	48 49	1 —	20 14	1	1	—	2	—	—	—	78 81	1 2
Chicken Pox	{ M. F. }	69 58	3 —	155 135	1 1	85 45	—	13 2	—	—	—	—	—	322 240	4 1
Diphtheria ...	{ M. F. }	13 7	2 5	85 66	17 7	45 42	2 5	5 6	—	—	—	—	—	148 121	21 27
Malaria ...	{ M. F. }	—	—	7 4	—	7 2	—	68 15	—	10 2	—	—	—	92 23	—
Mumps ...	{ M. F. }	—	—	30 16	—	219 105	—	125 20	—	3	—	—	—	377 107	—

[illegible]

Chapter IX.—International Health

WORLD HEALTH ORGANIZATION

World Health Assembly :

The World Health Assembly held its Fourth Session in Geneva during May 1951. Egypt was represented by a delegation headed by the Minister of Health and included the Under Secretary of State with four technical and one legal advisers.

Regional Committee :

The Regional Committee for the Eastern Mediterranean did not meet in Cyprus as was originally planned. This was in compliance with a decision adopted by the Arab League forbidding representatives of Arab countries from sitting with Israel's representatives on any regional meeting.

Egypt's Contribution to the W.H.O. Budget :

Egypt's contribution amounted to L.E. 19,500.

World Health Day :

As usual, the Ministry celebrated the World Health Day on April 7, 1951 being the anniversary of the coming into force of the W.H.O. Constitution having been ratified by 26 members of the United Nations on April 7, 1948.

W.H.O. Expert Committees :

The W.H.O. issued several technical reports compiled by its Expert Committees. These were distributed to the Departments and Sections concerned.

The following Expert Committee meetings were attended by Egyptian members :

Name of Committee	Place	Session	Name of Expert
Comm. on International Pharmacopoeia	Geneva	19-28 Apr. 1951	Prof. D.I.R. Fahmy
Comm. on Cholera ...	New Delhi	19-20 Nov. 1951	Prof. D.M.A. Gohar
Comm. on Nutrition ...	Rome	10-17 Apr. 1951	Prof. Dr. A. Hassan

Fellowships :

Ten W.H.O. Fellowships were awarded to Egypt during the year. These covered a wide range of subjects including Industrial Hygiene, Maternal and Child Health, Health Education etc.

Three fellowships to the International Child Centre of Paris were also awarded.

The Ministry received a number of fellows from State Members of the Region for study and training in various health fields specially Malaria and Endemic diseases control.

Principal Activities of International Organizations in Egypt during 1951 :

(1) The mass B.C.G. Vaccination Campaign was maintained in Egypt throughout the year with the assistance of the U.N.I.C.E.F. and the Danish Red Cross.

(2) Some Experts came to Egypt and discussed with the Ministry certain health problems.

(3) The Ministry, with the cooperation of the WHO, initiated a Regional Training Centre in Health and Vital Statistics. Forty four delegates representing different State Members of the Region attended the study in this Centre.

(4) Plans were made for a Tuberculosis Demonstration and Training Centre to be established at Bab El Shaaria.

(5) A Demonstration Centre for the Control of Venereal Diseases was established at Tanta and began work in May 1951. By the end of the year 25,000 persons had been examined, and 1,000 treated.

(6) The Agouza Laboratory started the production of B.C.G. vaccine to meet requirements of Egypt and neighbouring Arab countries.

(7) Several publications and scientific literature were supplied by WHO and distributed to the various Departments.

(8) Preliminary preparations for the institution of a Health Demonstration Area in Kaliub have been made.

(9) The Government sought the assistance of WHO and UNICEF for establishing a DDT production plant.

CONFERENCES AND MEETINGS IN 1951

Name	Place	Date
IXth International Congress of Entomology in Netherlands.	Amsterdam	17-24 August, 1951
Thirteenth International Congress of Psychology.	Stockholm	16-21 July, 1951
The Royal Sanitary Institute Health Congress	South Port (England)	23-27 April, 1951
Congrès International Jubilaire de la Société Française de Gynécologie.	Paris	23-29 June, 1951
Seventh International Hospital Congress. ...	Brussels	15-31 July, 1951
Les Journées Médicales de Bruxelles XXVe Session.	Brussels	9-13 June, 1951
Union Internationale pour l'Education Populaire.	Paris	11 April, 1951
International Association of Allergists. First International Congress.	Zurich	23-29 September, 1951
The National Association for the Prevention of Tuberculosis, London.	Paris	11-13 September, 1951
Exposition International des Arts Sanitaires.	Turin	30 May-12 June, 1951
Union Internationale contre le Péril Vénérien.	Paris	21 May, 1951
Second FAO Regional Meeting	Bloudan (Syria)	28 August, 1951
Congrès International des Sourds-Muets ...	Rome	19-23 September, 1951
Fédération Internationale Pharmaceutique XIVeme assemblée Générale.	Rome	23-29 September, 1951
International Blood Transfusion Congress ...	Lisbon	23-28 July, 1951
Second International Poliomyelitis Conference.	Copenhagen	3-7 September, 1951

Chapter X.—Medical Permits

TABLE No. 60.—NUMBER OF PRACTITIONERS OF THE MEDICAL AND ALLIED PROFESSIONS AT THE END OF THE YEAR 1951 AS COMPARED WITH THAT OF THE YEAR 1950

Professions	At the end of 1950	At the end of 1951
Medical Practitioners	4,797	5,151
Veterinary Surgeons	637	548*
Dental Surgeons	591	644
Dentists without diplomas	106	105†
Pharmacists	1,487	1,551
Midwives	1,046	275*
Assistant Pharmacists... ..	321	321†

† No permits are now issued to persons of these two categories.

* A law was enacted providing for the registration of previously authorised persons. The numbers shown represent those registered during the year under review.

TABLE No. 61.—NUMBER OF PERSONS AUTHORISED TO PRACTISE THEIR PROFESSIONS IN EGYPT DURING THE LAST FIVE YEARS

Professions	1947	1948	1949	1950	1951
Medical Practitioners	142	128	186	218	379
Veterinary Surgeons	24	1	53	42	23
Dental Surgeons	14	19	32	9	—
Pharmacists	120	77	81	98	65
Midwives	68	30	32	50	145*
Kabela	141	221	56	7	2,432*
Barbers	7	6	2	1	—

* A law was enacted providing for the registration of previously authorised persons. The numbers shown represent those registered during the year under review.

**TABLE NO. 62.—ORIGIN OF MEDICAL DIPLOMAS WHOSE HOLDERS
WERE AUTHORISED TO PRACTISE MEDICAL PROFESSIONS DURING 1951**

Professions	Cairo	Abbassia	Alexandria	Great Britain	Greece	Russia	France	Lebanon	America	Italy	Austria	Germany	Palestine	TOTAL
Medicine	264	29	61	4	6	—	5	3	2	3	1	1	—	379
Veterinary Surgery	23	—	—	—	—	—	—	—	—	—	—	—	—	23
Pharmacy	58	—	—	—	—	—	1	6	—	—	—	—	—	65
Midwifery	135	—	—	1	1	1	1	1	—	2	1	1	1	145

**TABLE NO. 63.—NATIONALITIES OF PERSONS AUTHORISED TO PRACTISE
MEDICAL PROFESSIONS DURING 1951**

Profession	Egyptians	Greeks	Americans	Rumanians	British	Germans	French	Russians	Italians	Syrians	Trans Jordan	Palestinians	TOTAL
Medical Practitioners	358	6	2	—	2	1	1	2	4	1	2	2	379
Veterinary Surgeons	23	—	—	—	—	—	—	—	—	—	—	—	23
Pharmacists	63	—	—	1	—	—	1	—	—	—	—	—	65
Midwives	138	1	—	—	2	—	—	1	3	—	—	—	145

**TABLE NO. 64.—ORIGIN OF MEDICAL DIPLOMAS OF EGYPTIAN PRACTITIONERS
WHO WERE AUTHORISED TO PRACTISE MEDICAL PROFESSIONS DURING 1951**

Professions	Cairo	Abbassia	Alexandria	Great Britain	Greece	France	Lebanon	Palestine	Austria	TOTAL
Medicine	258	29	—	2	2	3	3	—	1	358
Veterinary	23	—	—	—	—	—	—	—	—	23
Pharmacy	56	—	—	—	—	1	6	—	—	63
Midwifery	133	—	—	1	—	1	1	1	1	138

**TABLE NO. 65.—RESULT OF THE STATE EXAMINATIONS HELD DURING 1951 FOR MEDICAL
PRACTITIONERS, PHARMACISTS AND DENTAL SURGEONS HOLDING FOREIGN DIPLOMAS
FOR THE PURPOSE OF RECORDING THEIR NAMES IN THE MINISTRY'S RECISTER**

Examination	Number	Egyptians		Foreigners		TOTAL	
		Succeeded	Failed	Succeeded	Failed	Succeeded	Failed
Medicine	23	—	—	4	19	4	19
Pharmacy	3	—	—	—	3	—	3
Dentistry	24	1	1	3	19	4	20

PART II.—SOCIAL HYGIENE

Chapter XI.—Maternity and Child Welfare

The year under review was a continuance of last year's exceptional activities in the social field. Fellowships were awarded by the UNICEF and WHO to members of the Section to study developments abroad.

Cooperation is now firm between child welfare units and B.C.G. vaccination authorities. An appreciable number of the staff of child welfare centres have been trained in B.C.G. vaccination technique.

Following the termination of the final constructional works at Deirut child welfare centre, steps have been taken to prepare it for service. Final arrangements have been made to open the in-patient Section at Damietta.

The Abnoub child welfare centre, hitherto a unit of the provincial council, is being annexed to the Ministry.

The increase of the milk contribution to three times its former amount has been instrumental in improving the health of babes, increasing attendance at child welfare units and encouraging pregnant to seek accommodation in the in-patient sections for confinement.

The following statistical data describe the activities of child welfare units during the year.

TABLE No. 66

[illegible]

	NUMBER
Confinements forwarded to hospitals	2,192
„ occurred before arrival of staff	17,472
Still births-full term	948
Premature births within first three months	127
„ „ „ second three months	27
Still births after sixth month	446
Maternal mortality following child birth	62
Infantile mortality within first month of life	806
Visits to pregnant during 9th month by midwife	14,251
„ „ „ „ „ „ assistants	40,416
„ puerperal mothers by midwife	142,815
„ „ „ „ „ „ assistants	449,930
Visits for inspection of work of personnel	21,470
Other visits	13,710
Cases of Elcampsia	67
Perineal tears and Laceration of Perineum	705
Cases of Placenta Praeva	47
„ puerperal fever	38
„ high temperature	3,573
Urine samples examined	506,540
Pre-parturition Albuminuria	11,236
„ Diabetes	91
Visits to pregnant by assistant midwife	46,481
„ homes of infants	120,366
Other visits	23,779
Foods contributed	444,159 kgs.
Garments contributed	1,090
Cloth material contributed... ..	7,477 metres
Infants treated with X rays	21,596

Chapter XII.—Chest Diseases

Statistical Data :

According to last year's report, a total of 106,696 positive tuberculous cases were recorded by the Chest Diseases dispensaries between 1929 and 1950. A further 11,307 positive cases were detected during the year 1951, making a total of 118,003 cases at the end of 1951.

During the Year, the following units were opened :

(1) A new section in Alexandria Sanatorium (at Kom El Shoqafa), on March 27, 1951 by which beds have increased from 126 to 283.

(2) A Preventorium within Port Said Maritime Sanatorium on June 24, 1951.

(3) A Branch dispensary at Bilkas on November 11, 1951 in connection with Sherbin dispensary. This was however closed on December 9, 1951 and substituted by a dispensary

(4) A Chest Diseases dispensary at Marg Convalescent Colony on November 27, 1951.

Chest Diseases Units are now as follows :

25 Chest Diseases dispensaries.

1 Mobile Mass Radiography Unit (annexed to Mobtadayan Chest Diseases dispensary).

17 Branch dispensaries.

17 In-patient sections within dispensaries.

5 Sanatoria.

2 Surgical T.B. Institutions (exclusive of Port Said Maritime Sanatorium, functioning as a chest diseases unit though few bone cases have been admitted during the year).

5 Preventoria.

1 Colony for convalescents.

Mention was made in last year's report, that residents of Giza Village Sanatorium were removed to Almaza Sanatorium on April 13, 1950. In order to expedite repairs to the buildings and hasten the accommodation of the many patients on the waiting lists, a thousand pounds was contributed by each of the Society for Health Improvement and the Anti-tuberculosis Society. The Red Crescent Society expressed preparedness to contribute towards this humane scheme. It is hoped these repairs would be completed by mid 1952 and treatment resumed as heretofore.

The following are the occupations of tuberculous patients detected during the year 1951 :

671 Tradesmen consisting of
157 foodstuff vendors
64 poultry and cattle merchants
126 grocers
82 fruiterers
242 other trades.

882 Employees including
436 civil servants
210 commercial employees
68 teachers
168 other employments.

2,854 Craftsmen consisting of

109 cooks	67 waiters
217 barmen	84 domestic servants
70 servants (farrashes)	59 gate-keepers
115 barbers	104 laundrymen
159 drivers	170 tailors
116 shoemakers	146 carpenters
88 painters	189 building labourers
323 employees in cigarette firms, etc.	231 weavers
186 mechanics	40 printers
381 other occupations.	

2,292 Farmers.

408 Pupils.

4,200 Unemployed including

2,604 invalids

782 children

814 unemployed.

Of 180,873 new patients examined during the year, 11,307 were found positive for tuberculosis. Of these 730 were children (less than 10 years old) and the remaining 10,577 were adults.

Of 6,954 contacts (3,172 children and 3,782 adults) examined, 273 developed tuberculosis.

9,460 home visits were paid this year by medical officers and 34,737 by health visitors.

Appended to this report are detailed statistical data of the work carried out by the various dispensaries and other institutions.

RESUME OF ACTIVITIES IN MEDICAL AND SOCIAL SPHERES

I.—Medical, social and preventive activities proceeded according to plan. During the year, the following measures were undertaken :—

(a) At the request of the Ministry, the Alexandria Municipality handed over to the Section the premises of the Girls' Orphanage adjoining the Alexandria Sanatorium which has been equipped and furnished and opened to receive new patients as from March 27, 1951. The bedding accommodation of the sanatorium has thus increased from 126 to 283 beds.

(b) A Preventorium within Port Said Maritime Sanatorium has been provided to accommodate 50 children and opened on June 24, 1951.

(c) Since no chest diseases dispensaries existed in Marg area to examine and treat patients, it was decided to set up a dispensary within the Marg Convalescents Colony. An X-ray apparatus was therefore provided and the staff recruited from amongst the personnel of the Colony and other chest diseases units. Work was started in the Dispensary on November 27, 1951.

II.—B.C.G. vaccination was continued in several Provinces of Lower and Upper Egypt with the aid of some of the international teams whom it was agreed to keep in Egypt until the end of 1952. Meanwhile, vaccination centres will be provided in Chest Diseases Dispensaries and Child Welfare Centres.

Of a total of 2,867,012 persons tested by Tuberculin since the campaign was started in December 1949 until the end of 1951, 894,278 were vaccinated. These were distributed according to localities as follows:

TABLE No. 67.

Locality	Number Tested	Number Positive	Number Vaccinated
Cairo Governorate	230,954	41,092	61,879
Army units	12,445	8,227	3,411
Canal Governorate	122,683	47,303	40,691
Suez „	169	137	29
Gharbia Province	183,999	54,207	61,536
Dakahlia „	376,906	104,114	114,895
Sharkia „	331,907	136,609	143,076
Kaliubia „	240,613	87,619	75,288
Menoufia „	238,515	74,578	73,577
Fayoum „	3,841	1,277	414
Gerga „	20,812	5,312	7,655
Qena „	34,051	33,813	27,163
Aswan „	1,363	608	559
TOTAL	1,854,258	594,896	610,173
By adding cases for years 1949	7,771	5,577	1,061
and 1950	1,004,983	309,217	283,044
GRAND TOTAL	2,867,012	909,690	894,278

The B.C.G. vaccine is now prepared at the Sera and Vaccine Institute of this Ministry, although the concentrated tuberculin is still imported from Copenhagen. After dilution, the vaccine is supplied to the teams.

As the Central Statistical office could not be accommodated at the Central administration, it was temporarily accommodated at the Abbassia Chest Diseases Hospital. An experienced statistician nominated by WHO is in charge.

III.—Mass Radiography receives the special interest of the Section. Two units have been installed in Mobtadayan and Alexandria dispensaries for the examination of patients attending these dispensaries. Work was started in the former on January 6, 1951 and in the latter on August 12, 1951.

Two more stationary units and five mobile are proposed to serve the largest number of patients throughout the Country.

Cases examined during 1951 by the existing two Stationary units are :

TABLE No. 68.

Dispensary	Number examined	Number Positive	Number Suspected	Number Negative
Mobtadayan	15,442	1,086	1,872	12,484
Alexandria	2,360	396	34	1,930

Cases examined during the year by the mobile unit in the various parts of the country, however, are as follows :—

TABLE No. 69

Locality	Number Examined	Number Positive	Number Suspected	Number Negative	Dates of examination
Remainder of Mansoura School area	1,009	—	5	1,004	2 - 11. 1.51
Health Improvement Village, Pyramids	326	—	12	314	8. 2.51
Sugar Factory { Hawamdia ...	3,318	—	45	3,273	25.2 - 13. 3.51
Employees { Kom-Ombo ...	1,978	—	25	1,953	28.3 - 3. 4.51
{ Nag-Hamadi ...	4,697	—	44	4,653	12.4 - 23. 4.51
E. S. Railways { Luxor	532	—	1	531	8 - 9. 4.51
employees at { Souhag	838	—	7	831	26 - 28. 4.51
{ Minia	236	—	3	233	1. 5.51
Kom El Akhdar Village... ..	980	14	66	900	14- 30.10.51
Islamic Missions at El Azhar...	2,240	17	115	2,108	10 - 29.11.51
Army Recruits	3,702	19	5	3,678	13 - 26.12.51
TOTAL	19,856	50	328	19,478	(by Recruiting Office Apparatus).

Attached to this report is a statistical table of cases examined monthly by the Mobile Radiography Unit.

IV.—The total of L.E. 58,000 were distributed during the year among 3,664 families of destitute patients by the Chest Diseases Dispensaries.

Besides, a credit of L.E. 1,500 was granted by the Council of Ministers on November 11, 1951 for distribution to the poorer tuberculous patients during Winter.

The following are details of the different courses of treatment given by Chest Diseases Units during the year as well as details of accommodation, expenditures, receipts, etc.

TABLE No. 70.—LISTS OF THE DIFFERENT FORMS OF TREATMENT
FOLLOWED IN THE DISPENSARIES AND THE RESULTS THEREOF DURING THE YEAR 1951.

DORMITORY TREATMENT				ARTIFICIAL PNEUMOTHORAX					
		Number				Number			
CONDITION ON 1ST EXAMINATION	Tuberculous Patients		14,073	Patients treated A. P.		4,450			
	Sputum	positive	8,651	Inductions		1,404			
		negative	5,422	Refills		50,163			
	Lesion	unilateral	6,562	Sputum	Positive	3,561			
		bilateral	7,511		Negative	889			
		cavitary	6,680	Lesion	Unilateral	3,009			
	Last Sputum Ex.	positive	6,602		Bilateral	1,441			
		negative	7,471		Cavitary	2,816			
	Increase of weight		6,280	CONDITION BEFORE TREATMENT	Haemoptysis		468		
	Decrease of weight		2,772		Unilateral A.P.		3,748		
Stationary		4,063	Bilateral A.P.		654				
RESULT OF TREATMENT	Died		958		Extrapleural A.P.		48		
	Unable		4,873		Pneumo Peritonium P.P.				
	Walking		4,361		Continued refills		6,336		
	Light Work		3,095		STOPPED A.P. AND CAUSE	Adhesions		523	
	Full Work		786			Bilateralization		453	
						Effusion		314	
						Sputum still positive		1,680	
			,, ,, negative		737				
			,, returned negative ..		1,703				
			,, ,, positive ..		330				
Increase of weight		2,705	RESULT OF TREATMENT	Increase of weight		2,705			
Decrease of weight		567		Decrease of weight		567			
Stationary		960		Stationary		960			
Died		212		Died		212			
Incapable		896		Incapable		896			
Walking		1,078		Walking		1,078			
Light Work		1,759		Light Work		1,759			
Full work		499	Full work		499				

TABLE NO. 71.—STATISTICS OF PATIENTS IN SANATORIA AND IN-SECTIONS OF DISPENSARIES (TANTA, MANSOURA, DAMANHOUR, SHEBIN EL KOM, ZAGAZIG, DAMIETTA, SHERBIN, ZIFTA, FAYOUM, BENI SUEF, MINIA, MALLAWI, ASSIUT, SOUHAG AND ASWAN) IN 1951, AND THE RESULTS OF THEIR TREATMENT.

UNITS		SANATORIA							In-pt. sections in Disp.		
		Almaza	Abbassia	Giza	Alex.	Mehalla el-Kobra	Suez	Port-Said			
Before Admission	No. of In-patients discharged ...		1,939	1,046	262	555	487	68	525	2,109	
	Sputum	{ positive ...	877	607	137	350	362	60	293	1,018	
		{ negative ...	1,062	439	125	205	12	8	232	1,091	
	Lesion	{ unilateral ...	10,200	462	72	368	309	68	415	1,507	
		{ bilateral ...	919	584	190	187	178	—	110	602	
Treatment given	Temperature	{ cavitary ...	1,112	895	160	96	340	—	152	892	
		{ normal ...	1,030	295	102	289	352	21	281	1,003	
	{ abnormal ...	909	751	160	266	135	47	244	1,106		
Cause of discharge	General Treatment		1,039	1,046	150	176	324	68	383	884	
	Exercise Treatment		900	471	112	79	163	—	342	499	
	Gold therapy	{ No. of patients ...	—	—	—	—	—	—	—	37	
		{ No. of injections ...	—	—	—	—	—	—	—	328	
	Streptomycine injection.	{ No. of patients ...	412	333	62	148	835	14	427	596	
		{ No. of injections ...	16,500	11,865	2,105	4,400	1,523	1,312	17,086	24,805	
	A.P.	{ Inductions	421	215	45	193	279	64	194	1,247	
		{ Refills	3,625	5,728	1,159	3,926	3,475	1,941	2,488	18,187	
	Extrapleural A.P.		2	—	—	—	37	—	210	56	
	Phrenic Crush		412	269	—	55	97	2	9	238	
	Pleuratomy		19	1	—	—	—	—	—	—	
	Aspiration		647	203	97	43	69	47	105	1,181	
	Thoracoplasty		35	29	—	—	1	6	1	6	
	Adhesiectomy		453	279	—	46	41	16	65	123	
	Complications		194	372	89	28	—	—	—	89	
	No. of other injections given ...		9,555	7,993	758	2,837	1,917	1,043	3,627	12,847	
	Condition on Discharge	Patient went on leave and did not return		672	79	69	40	47	8	32	84
		At request	{ Pts. refused treatment...	—	495	—	230	—	—	7	182
{ „ having special difficulties			394	44	80	—	93	5	131	255	
With agreement of physician ...		873	428	113	285	347	55	355	1,588		
Condition on Discharge	Weight	{ increase of weight ...	1,120	742	181	332	334	45	352	1,528	
		{ decrease of weight ...	19	216	20	110	72	13	88	287	
		{ Stationary	800	88	61	113	81	10	85	294	
	Temperature	{ Normal	1,319	803	202	450	348	45	438	1,496	
		{ Abnormal	680	243	60	105	139	23	87	613	
	Sputum	{ still positive	840	554	98	312	246	15	205	612	
		{ „ negative	62	109	20	104	125	15	212	609	
		{ became negative	1,000	330	105	101	116	30	81	720	
		{ „ positive	37	53	39	38	—	8	27	128	
	Successful A.P. continued		637	229	180	232	279	58	101	1,000	
	A.P. failed		287	207	80	52	37	6	26	265	
	Condition improved		1,349	667	122	273	334	46	334	1,499	
	„ worse		86	47	22	46	60	9	43	178	
	„ stationary		334	257	61	192	81	9	100	401	
	Died		170	75	57	44	12	4	48	46	
	Ability to work	{ full work	5	22	3	15	19	21	—	67	
		{ partial work	1,364	406	129	271	255	21	333	1,366	
		{ incapable	400	513	73	225	201	22	139	608	
Average duration of stay in days		170	167	155	116	95	235	90	120		
Patients stayed 6 months or more...		919	223	130	119	199	39	68	636		
„ „ less than 6 months ...		1,020	823	132	436	288	29	457	1,473		

TABLE No. 72.- POSITIVE T.B. CASES NOTIFIED BY THE CHEST DISEASES DISPENSARIES ACCORDING TO RESIDENCE -- DURING 1951.

Dispensary	Cairo	Alex.	Damietta	Port-Said	Canal-Suez & Ismailia	Behera	Gharbia	Fouadia	Menoufia	Dakahlia	Sharkia	Kalubia	Giza	Beni Suef	Fayoum	Minia	Assiut	Gerga	Qena	Aswan	Cases	Total
Boulaq...	1,374	6	2							4	2	139	79	3			4	2	3	2	1	1,624
Mobtadayan	473	9	9				42	15	21	30	41	64	297	8			6	5		16		1,086
Khalifa	872	15		3			57				4	67	45									1,073
Marg ...	3											15										18
Damanhour		16				365	8	86														475
Alexandria		620				40																660
Baccus		321				20																341
Tanta						3	327	10	22													363
Mansoura	2	1					71			258	4								1			337
Shebin el Kom							1	1	278			32										313
Mohalla el Kobra							320	71	3	25									1			421
Zagazig					19					24	352	8										413
Damietta			300				68	3		260									1			632
Port-Said		1	2	401	124		4			29	2											563
Sherbin							186			151												343
Zifta							156			119												335
Suez					197																	197
Fayoum													5	46	262							313
Beni Suef														236								237
Minia																	279	13				293
Mellawi																	5	351				365
Assiut	1																344	21	1			387
Souhag																		192	7			199
Qena																			243	5	2	250
Aswan...																			10	130		140
TOTAL	5,726	989	313	404	383	434	1,240	190	326	910	405	325	426	293	262	300	718	220	287	153	3	11,307

TABLE NO. 73.—CASES REPORTED DEAD TO THE DISPENSARIES DURING THE YEAR 1951
ACCORDING TO AGES

Dispensary	1—5 Years	5—15 Years	15—25 Years	25—35 Years	35—45 Years	Above 45 Years	TOTAL
Boulaq	7	8	11	21	20	7	74
Mobtadayan	4	7	48	50	15	12	136
Khalifa	4	46	77	80	61	36	304
Marg	—	—	—	—	—	—	—
Damanhour	—	2	12	19	18	7	58
Alexandria	2	10	8	5	5	2	32
Baccus	2	—	7	—	2	1	12
Tanta	1	2	6	9	7	3	28
Mansoura	—	1	16	26	7	2	52
Shebin el Kom ...	1	1	24	25	9	10	70
Mehalla el Kobra ...	3	5	18	34	19	5	84
Zagazig	—	—	3	5	7	1	16
Damietta	13	7	5	4	11	12	52
Port-Said	3	6	23	17	27	11	87
Sherbin	1	2	1	5	8	5	22
Zifta	1	2	22	9	5	3	42
Suez	—	7	18	6	11	9	51
Fayoum	—	2	19	38	25	12	96
Beni Suef	—	—	9	16	17	4	46
Minia	1	3	15	17	8	12	56
Mellawi	—	1	6	13	7	5	32
Assiut	2	1	6	23	6	5	43
Souhag	2	4	16	8	4	7	41
Qena	1	—	6	15	2	3	27
Aswan	—	—	1	4	4	1	10
TOTAL	48	117	377	449	305	175	1,471

TABLE NO. 74.—PROGRESS OF UNITS ATTACHED TO THE SECTION FROM 1929 TO 1951

Year	Chest Diss. Dispensaries			Chest Sanatoria	T.B. Bone Sanatoria	Preventoria	T.B. convalescent colony
	Dispensaries	Branches	In-Patient Sections				
1929... ..	2	—	—	—	—	—	—
1930... ..	3	—	—	—	—	—	—
1931... ..	3	—	—	—	—	—	—
1932... ..	3	—	—	—	—	—	—
1933... ..	4	—	—	—	—	—	—
1934... ..	4	—	—	1	—	—	—
1935... ..	5	—	—	1	—	—	—
1936... ..	6	—	—	1	1	—	—
1937... ..	8	—	—	1	1	—	—
1938... ..	12	—	2	2	1	1	—
1939... ..	13	—	2	2	1	1	—
1940... ..	14	—	4	2	1	4	—
1941... ..	14	1	4	2	1	4	—
1942... ..	15	3	6	2	2	4	—
1943... ..	15	3	6	2	2	4	—
1944... ..	16	4	8	3	2	4	1
1945... ..	17	4	10	3	2	4	1
1946... ..	19	12	12	4	2	4	1
1947... ..	19	14	12	5	2	4	1
1948... ..	21	15	13	5	3	4	1
1949... ..	24	17	15	5	3	4	1
1950... ..	25	17	17	5	3	4	1
1951... ..	26 ⁽¹⁾	17	17	5	3	5	1

(1) Including a mobile unit for mass radiography survey.

TABLE NO. 75.—ANNUAL RETURN OF BEDS AVAILABLE IN THE IN-PATIENT UNITS
AT THE END OF THE YEAR 1951

Unit	1st Class		2nd Class		3rd Class Paying		3rd Class Gratis			Beds for Sur- gery	TOTAL
	F.	M.	F.	M.	F.	M.	F.	M.	Children		
Almaza Sanatorium	—	5	—	82	—	132	—	520	—	128	867
Abbassia Chest Dis. Hospital	—	—	31	—	62	—	315	—	81	37	526
Giza Sanatorium ...	—	—	—	—	—	—	—	155	—	—	155
Alexandria Sanato- rium	—	—	—	2	7	14	112	171	4	—	283
Mehalla el Kobra Sanatorium ...	—	—	2	6	3	6	52	106	—	—	179
Suez Chest Diseases Hospital	—	—	1	1	2	2	22	22	—	—	50
Damanhour Dis- pensary	—	—	—	—	—	6	26	72	—	—	104
Tanta Dispensary	—	—	—	—	—	—	—	20	—	—	20
Mansoura ,,	—	—	—	—	—	—	10	15	—	—	25
Shebin el kom,,	—	—	—	—	—	—	9	11	—	—	20
Zagazig ,,	—	—	—	—	—	—	30	36	—	—	66
Damietta ,,	—	—	2	2	4	4	69	69	—	—	150
Sherbin ,,	—	—	—	—	—	—	—	30	—	—	30
Zifta ,,	—	—	—	—	—	—	—	26	—	—	26
Fayoum ,,	—	—	—	—	—	—	—	30	—	—	30
Beni Suef ,,	—	—	—	—	—	—	10	15	—	—	25
Minia ,,	—	—	—	—	—	—	6	14	—	—	20
Mellawi ,,	—	—	—	—	—	—	17	18	—	—	35
Assiut ,,	—	—	—	—	—	—	25	50	—	—	75
Souhag ,,	—	—	—	—	—	—	4	20	—	—	24
Aswan ,,	—	—	—	—	—	—	7	15	—	—	22
Maritime Sanat.Port Said (Pulmon.T.B. Bones)	—	—	—	2	8	11	31	89	12	—	153
Maritime Sanat. Alexandria ...	—	—	—	—	—	—	24	25	51	—	100
Bones Hospital, Helwan	—	—	1	3	4	12	60	65	55	—	200
Helwan Prevento- rium	—	—	—	—	—	—	—	—	90	—	90
Marg Preventorium	—	—	—	—	—	—	—	—	50	—	50
Port Said ,,	—	—	—	—	—	—	—	—	50	—	50
Mellawi ,,	—	—	—	—	—	—	—	—	50	—	50
Assiut Prevento- rium	—	—	—	—	—	—	—	—	50	—	50
Village Settlement at Marg	—	—	—	—	—	—	—	—	—	—	77 families
TOTAL	—	5	37	98	90	187	831	1,596	496	165	3,559

TABLE No. 76.—ACCOUNT OF EXPENSES OF THE CHEST DISEASES UNITS
DURING THE YEAR 1951

Unit	Salaries	Equip. Instru- ments & Drugs	Diets	Rent, Water, Light & Sewage	Transport	Miscellan. Expenses	Total	Contributions		
								Sums Paid		No. of families
	L.E.	L.E.	L.E.	L.E.	L.E.	L.E.	L.E.	L.E.	M.	
Boulaq Disp.	—	434	—	—	1,326	37	1,797	7,706	140	467
Mobtadayan										
Disp. ...	4,909	5,747	32	257	612	104	11,661	6,397	319	473
Khalifa Disp.	2,520	750	9	253	150	200	3,882	10,597	910	263
Damanhour										
Disp. ...	3,565	746	6,680	1,255	164	388	12,798	1,742	629	202
Alexandria										
Disp. ...	1,555	156	—	55	265	25	2,056	3,028	239	180
Tanta Disp.	2,088	1,168	979	129	58	20	4,445	1,472	906	75
Mansoura Di-	2,256	400	1,593	270	12	41	4,571	1,346	100	223
Shebin el										
Kom Disp.	1,864	216	1,114	368	1	89	3,652	1,245	008	83
Mehalla el										
Kobra Dis.	1,276	349	4	152	136	22	1,939	1,697	753	161
Zagazig Disp.	4,750	5	3,954	423	15	206	9,352	1,120	220	143
Damietta Dis.	5,772	339	7,647	102	168	71	14,099	2,016	568	390
Port Said										
Disp. ...	6,092	1,076	7,475	339	95	399	15,476	1,493	682	145
Sherbin Disp	1,395	408	98	96	139	13	2,149	1,310	950	81
Zifta Disp.	2,051	9	1,818	314	28	136	5,156	351	991	56
Suez Disp.	2,501	—	2,968	72	63	362	5,966	962	489	108
Fayoum Dis.	2,013	689	1,825	181	218	46	4,972	1,012	424	102
Beni-Suef										
Disp. ...	1,855	—	1,488	196	15	73	3,627	559	574	42
Minia Disp.	1,652	1,893	1,114	279	57	42	5,037	1,020	110	90
Mellawi Disp.	2,065	—	2,137	788	319	76	5,385	735	888	97
Assiut Disp.	2,736	1,998	3,354	313	161	84	8,646	1,781	295	103
								Through Women's Society		
Souhag Disp.	1,506	900	1,312	320	54	41	4,133	882	047	94
Qena Disp.	1,096	—	—	111	43	2	1,252	586	265	33
Aswan Disp.	1,561	94	1,430	366	20	41	3,512	809	674	53
Almaza San.	34,483	202	57,261	—	6	2,821	94,773	—	—	—
Abbassia										
Hospital ...	21,524	9,128	31,228	1,706	400	173	65,722	—	—	—
Giza San. ...	2,282	—	6,157	—	—	—	8,439	—	—	—
Alexandria										
San. ...	5,324	4,276	13,853	485	5	371	24,314	—	—	—
Mehalla el										
Kobra San.	6,187	4,000	10,804	2,400	220	342	23,953	8,498	928	
Alexandria										
M.S. ...	3,664	2,455	4,321	156	10	217	10,823	(for clothes)		
Helwan Bones										
Hospital ...	8,632	28	11,023	606	258	86	20,633	—	—	—
Helwan										
Preven ...	2,665	154	1,552	—	17	20	4,408	—	—	—
Marg Preven	340	—	351	—	—	22	713	—	—	—
Assiut Preven	743	523	548	93	7	57	1,971	—	—	—
Marg C. Set.	10,440	64	1,410	80	118	139	12,301	—	—	—
B.C.G. Vacci.										
Campg. ...	5,943	—	—	750	1,069	6,181	13,943	—	—	—
TOTAL...	159,304	38,707	185,539	12,920	6,229	15,357	417,556	57,956	174	3,664

TABLE No. 77.—AN ANNUAL DETAILED ACCOUNT OF RECEIPTS OF THE UNITS
DURING THE YEAR 1951

Unit	Treatment Fees		Deposits from Patients		Fees of Official Documents		Deposits from Contractors		Articles Sold By Public Auction		Miscellaneous receipts		TOTAL		GRAND TOTAL	
	L.E.	M.	L.E.	M.	L.E.	M.	L.E.	M.	L.E.	M.	L.E.	M.	L.E.	M.	L.E.	M.
Almaza S.	13,240	300	2,244	—	10	710	—	—	—	—	41	686	15,536	696	—	—
AbbassiaH.	6,237	800	1,065	—	—	430	6	—	—	—	131	738	7,440	968	—	—
Giza S. ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mehalla el Kobra S.	1,174	400	222	—	—	430	4	220	30	400	33	684	1,460	914	—	—
Alexandria. S. ...	496	600	168	—	—	—	4	220	—	—	17	718	686	538	—	—
Suez H. ...	332	200	69	—	—	—	3	100	—	—	26	464	430	764	—	—
Damanhour	204	—	87	—	1	720	8	—	—	—	15	—	315	720	—	—
Damietta H. ...	228	200	60	—	1	840	11	300	—	—	32	760	334	100	—	—
Port Said M.S. ...	787	400	141	—	3	870	—	—	—	—	37	274	969	544	—	—
Helwan Bones H.	612	600	428	—	—	500	—	—	—	—	47	780	1,088	880	—	—
TOTAL...	23,313	500	4,484	—	19	500	32	620	30	400	384	104	28,264	124	28,264	124

RECEIPTS OF THE VARIOUS WORKSHOPS AT THE TUBERCULOSIS CONVALESCENTS
SETTLEMENT AT MARG

	Carpenters Workshop		Tailors Workshop		Shoemakers Workshop		Tinsmiths Workshop		Brooms Workshop		Miscellaneous receipts		TOTAL		L.E.	M.
	L.E.	M.	L.E.	M.	L.E.	M.	L.E.	M.	L.E.	M.	L.E.	M.	L.E.	M.		
Marg C.S.	247	240	244	400	1,036	300	137	516	39	724	1,040	743	2,745	923	2,745	923
															31,010	047

Number of Children on 1st. January 1951	43
" " " admitted during the year	81
" " " discharged " " " "	53
" " " on Dec. 31, 1951... ..	71

N.B.—Port-Said Preventorium started work within the

TABLE NO. 80—ANNUAL RETURN OF CASES TREATED IN ALEXANDRIA MARITIME

UNIT	New Patients											Old Patients											
	No. of New-Patients	Ages						Cases				No. of Old Patients	Cases				Treat-ment		Minor Operations	X. Ray			
		Under 5 years.		5—10 years		Above 10 years.		Rickets	T.B. Spine	T.B. Bones of Joints	Other Dis.		Rickets	T.B. Spine	T.B. Bones of Joints	Other Dis.	By Electricity	By Ult. Violet					
		M.	F.	M.	F.	M.	F.																
Alexandria Maritime Sanatorium	274	32	21	38	21	95	67	6	65	69	134	383	—	153	177	53	—	13	53	233			
Port-Said Maritime Sanatorium	2	—	—	—	—	2	—	—	—	2	—	—	—	—	—	—	—	—	—	—			
Helwan Bone Hospital	961	53	37	108	76	336	36	8	253	251	449	1,050	4	245	433	368	—	—	—	—			
TOTAL ...	1,334	85	59	146	97	433	403	14	318	322	583	1,433	4	398	610	421	—	13	53	233			

Number of patients	On 1st. January 1951	96
" " "	Admitted during the year	178
" " "	Discharged " "	160
" " "	On Dec. 31, 1951	114

N.B.—Port-Said Maritime Sanatorium works as a Chest Diseases U

REVENTORIA DURING THE YEAR 1951

0			Details regarding relatives									Mantoux Test			Diseases attacked children						Children		Remarks	
rs.			Morethan			Relation						in child				During their residence						Discharg		
			10 Years.																			ed		
F.	M.	F.	Father	Mother	Brother	Sister	Others	Died	Alive	Sputum Neg.	X-Ray-Pos.	Positive	Negative	Not Done	Skin	Stomach	Enteritis	Ophthalmia	Chest	Other diseases	Discharged	Died		
1	1	1	33	39	—	—	9	8	73	9	72	4	7	60	15	23	71	23	4	69	38	15		
—	—	—	5	—	1	—	—	—	6	—	6	—	—	6	—	—	—	—	—	2	17	—		
—	—	—	12	3	5	—	—	—	20	20	—	30	—	—	—	—	—	—	—	—	16	—		
3	7	3	16	24	—	—	13	8	45	37	16	53	—	—	1	1	2	15	1	11	37	1		
—	1	—	8	8	—	—	—	3	13	16	—	2	—	14	3	—	—	39	—	13	32	2		
4	9	4	74	74	6	—	22	19	157	82	94	89	7	80	19	24	73	77	5	95	140	18		

Marg	Port-Said	Mellawi	Assiut
44	—	6	34
6	20	53	16
17	16	38	34
33	4	21	16

ritime Sanatorium from June 24, 1951.

ATORIUM AND HELWAN HOSPITAL FOR BONE DISEASES DURING THE YEAR 1951

IN-PATIENT SECTION

Admitted	New Patients											Discharged					Treat.		Major Operations	Minor Operations	Plaster	X — Ray	Streptomycin Inj.		
	Ages						T.B. Spine	T.B. Knee	T.B. Hip	T.B. Bones of Joints	Other Diseases	No. of Pat. Discharged	Result					By Electricity						By Ultra-Violet	
	Under 5 Years		5-10 Years		above 10 Years								Died	Cured	Stationary	Improved	Discharged. in Plaster								
	M.	F.	M.	F.	M.	F.																			
8	8	17	33	22	64	34	76	20	44	36	2	160	6	28	34	58	34	—	21	31	—	169	510	7023	
4	—	—	—	—	3	1	—	—	4	—	—	6	—	1	3	2	—	—	—	—	—	—	—	—	300
12	16	6	44	36	233	177	198	32	45	24	213	520	14	228	146	93	39	—	60	43	5	426	1,235	7,629	
94	24	23	77	58	300	212	274	52	93	60	215	686	20	257	183	153	73	—	81	74	5	595	1,745	14,952	

Port Said M.S.	Helwan B.H.
4	210
4	512
6	520
2	202

d has 7 beds for Bone Diseases

TABLE No. 81.—ANNUAL RETURN FOR CHEST

Dispensary	New Cases Seeking Treatment (Dispensary)	(New T.B. Cases in the Dispensary)													
		T. B. Cases			Other Chest Diseases	Age Groups									
		TOTAL	Sputum +	X. Rays +		From 1-9 Years		From 10-19 Years		From 20-29 Years		From 30-39 Years		From 40-49 Years	
						M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
Boulaq... ..	7,576	1,624	695	929	5,939	140	112	182	153	338	203	203	75	85	
Mobtadayan	15,082	1,086	666	420	13,996	50	30	104	59	259	104	173	92	87	
Khalifa	10,977	1,073	630	443	9,904	9	11	84	91	214	164	209	106	91	
Marg	160	18	12	6	124	1	—	1	—	5	3	3	2	2	
Damanhour	8,585	475	472	3	8,110	1	9	44	31	153	49	79	24	50	
Alexandria	6,603	660	468	192	5,943	18	13	80	54	197	63	138	32	47	
Baccus... ..	6,868	341	221	120	6,527	21	15	37	20	93	35	52	15	24	
Tanta	8,610	362	234	128	8,248	5	3	37	13	78	44	83	35	31	
Mansoura	8,712	337	257	80	8,375	5	—	32	18	80	23	76	29	46	
Shebin el-Kom	8,561	312	177	135	8,249	5	6	25	17	87	30	47	21	30	
Mehalla el-Kobra	9,024	421	312	109	8,603	9	5	37	27	98	31	115	34	37	
Zagazig	11,631	423	316	97	11,218	—	—	21	21	100	37	120	47	30	
Damietta	10,129	632	343	289	9,497	17	19	65	38	182	99	83	36	45	
Port-Said	6,428	563	218	345	5,865	60	38	54	40	105	53	92	30	48	
Sherbin	8,185	343	240	103	7,842	12	12	21	21	80	34	67	40	32	
Zifta	4,695	275	176	99	4,420	12	10	33	13	51	32	53	29	15	
Suez	2,752	197	151	46	2,555	3	2	13	15	60	25	48	7	8	
Fayoum	6,208	313	276	37	5,830	2	4	18	3	66	25	77	47	41	
Beni Suef	4,306	237	198	39	4,068	3	3	9	10	34	15	41	35	43	
Minia	6,022	293	54	239	5,729	1	3	15	12	38	28	50	42	52	
Mallewi	9,511	356	118	238	9,155	8	5	23	12	34	22	75	41	56	
Assiut	9,229	386	197	190	8,842	17	14	26	22	81	62	47	45	16	
Souhag	6,174	199	104	95	5,887	4	4	15	13	40	22	27	18	16	
Qena	3,237	250	175	75	2,987	6	3	12	10	69	16	61	20	27	
Aswan	1,608	140	75	65	1,468	2	1	8	5	32	22	31	11	13	
TOTAL	180,873	11,307	6,785	4,522	169399	411	319	996	718	2,574	1,241	2,050	913	972	

DISPENSARIES DURING THE YEAR 1951

(Patients Admitted To Sanatorium)

			Professions							Disp.		Classes (Sanat.)			
Over 60 Years			Vendors	Officials	Workmen	Peasants	Students	No. Occupation	Cases Recorded for San.	Cases Admitted To Sana.	Ist.	2nd.	3rd Paying	3rd Gratis	
M.	F.														
	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
21	18	10	78	162	464	92	41	787	1,063	743	—	—	—	—	—
25	16	6	62	112	332	112	43	425	894	603	—	—	—	—	—
22	7	2	201	141	197	143	122	269	719	527	—	—	—	—	—
	—	—	—	2	7	3	—	6	9	1	—	—	—	—	—
5	5	—	18	34	113	170	9	131	365	312	—	—	27	285	—
1	1	—	47	72	282	25	5	229	512	479	—	—	—	—	—
2	4	1	18	33	129	19	9	133	143	167	—	—	—	—	—
8	3	1	20	27	101	80	18	116	236	183	—	—	—	—	69
1	—	1	18	19	91	107	7	95	241	174	—	—	—	—	47
7	6	2	18	12	75	89	7	111	145	60	—	—	—	—	43
6	7	2	14	19	137	112	13	126	251	191	—	—	—	—	—
4	4	—	20	8	127	132	5	121	200	198	—	—	—	—	155
2	7	1	11	7	76	254	7	277	807	879	—	—	18	861	—
2	8	1	41	42	186	22	39	233	580	540	—	6	45	489	—
7	5	2	10	14	44	135	9	131	192	75	—	—	—	—	—
3	2	4	8	12	57	61	16	121	69	123	—	—	—	—	88
	1	1	12	21	97	6	3	58	127	66	—	—	23	43	—
7	3	—	25	20	49	117	1	101	97	86	—	—	—	—	85
6	3	2	6	21	40	64	6	100	104	75	—	—	—	—	75
0	11	5	7	12	46	92	5	131	175	58	—	—	—	—	58
3	8	7	7	7	39	158	1	144	284	80	—	—	—	—	78
7	10	1	12	28	31	135	19	162	237	139	—	—	—	—	139
8	5	—	4	20	35	57	6	77	217	86	—	—	—	—	76
7	2	1	11	18	66	75	13	67	105	34	—	—	—	—	—
	5	—	3	19	33	32	4	49	142	78	—	—	—	—	78
4	141	50	671	882	2,854	2292	408	4,200	7,914	5,957	—	6	113	2669	—

TABLE NO. 81.—ANNUAL RETURN FOR

Dispensary	New Contacts (Disp.)			Cases under Observation (Disp)	Haemoptysis	Sputum Examination			
	Children	Adults	T.B. Contacts			Total of Sputum	Sputum of New Cases		Sputum of Old Cases
							No.	Pos.	No.
	32	34	35	36	37	38	39	40	41
Boulaq	248	186	16	111	53	1,977	1,739	695	238
Mobtadayan	449	442	34	305	36	3,450	2,631	666	819
Khalifa	463	448	66	36	24	2,199	1,561	630	638
Marg	7	3	—	—	—	23	18	12	5
Damanhour	166	140	12	31	116	899	623	472	276
Alexandria	106	104	3	92	—	995	888	468	107
Baecus... ..	151	132	19	86	—	1,065	653	221	412
Tanta	137	141	3	100	13	783	532	234	251
Mansoura	21	95	5	72	13	1,024	641	257	383
Shebin el-Kom	45	99	5	170	30	509	445	177	64
Mehalla el-Kobra	213	263	9	181	—	823	624	312	199
Zagazig	195	299	8	207	39	1,480	839	316	641
Damietta	254	316	3	110	11	1,438	954	343	484
Port-Said	9	163	—	271	58	1,810	726	218	1,084
Sherbin	85	129	11	38	23	554	491	240	63
Zifta	121	129	16	125	29	596	327	176	269
Suez	100	130	—	146	14	842	402	151	440
Fayoum	42	89	2	65	54	758	417	276	341
Beni Suef	85	89	18	67	5	843	556	198	287
Minia	89	116	2	291	7	521	340	54	181
Mallewi	44	86	—	92	16	562	387	118	175
Assiut	128	158	27	307	104	1,266	626	197	640
Souhag	59	58	4	84	27	372	248	104	124
Qena	—	2	—	8	—	297	267	175	30
Aswan... ..	12	21	—	16	7	252	106	75	146
TOTAL	3,229	3,838	263	3,011	679	25,338	17,041	6,785	8,297

DISEASES DISPENSARIES DURING THE YEAR 1951. (continued)

X-Ray Examination						Exam. of (Sanat)				Old Cases (Disp.)					Visits (Disp.)	
TOTAL OF X-RAY	New Cases		Old Patients			Teeth	Nose	Throat	Ears	TOTAL	T.B. Cases	Under Observation	Contacts	Other Chest Diseases	Nurse Visits	M.O. Visits
			Pos.	Under Observ.												
	No.	Pos.	No.	No.	Pos.											
42	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59
2,174	1,925	1,470	230	19	—	—	—	—	—	5,418	3,692	910	408	408	4,632	379
1,862	1,824	363	33	5	2	—	—	—	—	18,910	8,766	1,546	1,223	7,375	3,804	444
1,521	1,149	927	47	325	74	—	—	—	—	11,384	7,578	1,113	1,120	1,573	1,730	300
14	14	13	—	—	—	—	—	—	—	32	20	—	—	12	—	—
679	472	472	207	—	—	—	—	—	—	8,868	3,512	331	183	4,842	1,200	635
961	948	590	13	—	—	—	—	—	—	5,312	4,292	586	179	255	1,968	408
—	—	—	—	—	—	—	—	—	—	7,843	2,458	344	360	4,681	—	—
539	447	314	74	9	—	—	—	—	—	8,537	3,638	571	322	4,006	1,467	350
306	188	110	95	23	1	—	—	—	—	3,112	727	21	164	2,200	1,541	378
179	104	100	73	2	1	—	—	—	—	5,645	3,081	1,204	13	1,347	1,489	362
961	594	412	92	5	—	—	—	—	—	8,962	6,627	640	449	1,246	1,830	580
511	242	165	264	5	—	—	—	—	—	10,693	4,813	521	383	4,976	1,474	334
1,889	1,094	756	608	187	3	126	—	—	—	6,998	4,018	237	295	2,448	973	647
1,102	415	309	627	60	—	—	—	—	—	3,100	2,186	672	542	—	936	464
21	10	10	11	—	—	—	—	—	—	3,629	1,884	166	167	1,412	1,028	299
357	213	124	129	15	1	—	—	—	—	9,256	4,304	28	—	4,924	587	168
722	185	131	516	21	—	—	—	—	—	2,130	1,296	297	177	369	794	579
263	94	72	164	5	—	—	—	—	—	4,838	1,801	98	2	2,937	2,304	770
—	—	—	—	—	—	—	—	—	—	5,319	2,602	567	475	1,675	496	60
817	535	209	244	38	—	—	—	—	—	10,141	3,612	1,939	472	4,118	1,566	283
662	520	329	142	—	—	—	—	—	—	1,359	1,097	262	—	—	1,295	469
1,295	902	565	386	7	1	—	—	—	—	7,139	4,371	727	613	1,428	1,542	609
258	185	127	66	7	1	—	—	—	—	5,796	2,239	393	62	3,102	1,026	391
140	117	79	21	2	—	—	—	—	—	2,769	1,053	35	41	1,640	641	366
2	1	1	1	—	—	—	—	—	—	2,431	1,003	42	33	1,353	414	185
16,956	12,178	7,648	4,043	735	84	126	—	—	—	159,630	80,670	13,250	7,383	58,327	34,737	9,460

TABLE NO. 81.—ANNUAL RETURN FOR CHEST DISEASES

Dispensary	Discharged Patients										Treatment				
	TOTAL	Sputum on Discharge		Improved	Stationary	Worse	Died	Ability of Work			Streptomycin Injections	Gold	Other Injections	Exercise Treatment	General Treatment
		Pos.	Neg.					Complete	Partial	Unable					
	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74
Boulaq	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobtadayan	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Khalifa	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Marg	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Damanhour	251	142	109	150	58	36	7	1	137	106	3,557	11	4,472	621	939
Alexandria... ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Baccus... ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Tanta	68	40	28	47	16	4	1	3	30	34	480	100	492	—	—
Mansoura	46	18	28	22	10	12	2	—	26	18	367	—	252	—	—
Shebin el-Kom	38	25	13	17	18	—	1	—	17	20	145	—	200	—	—
Mehalla el-Kobra	—	—	—	—	—	—	—	—	—	—	—	—	163	—	—
Zagazig	147	84	63	88	42	15	2	—	83	62	—	—	—	—	78
Damietta	866	201	665	665	142	51	8	—	665	193	8,975	—	1,217	—	—
Port-Said	525	232	293	334	100	43	48	—	338	139	427	—	3,627	28	34
Sherbin	—	—	—	—	—	—	—	—	—	—	—	—	5	—	—
Zifta	85	46	39	42	35	3	5	—	40	40	—	—	260	—	—
Suez	68	23	45	46	9	9	4	—	42	22	1,312	—	1,043	—	493
Fayoum	90	55	35	74	14	2	—	1	68	21	1,056	64	291	—	—
Beni Suef	76	26	50	52	15	8	1	1	59	15	320	—	58	—	—
Minia	54	16	38	44	7	2	1	—	23	30	1,890	59	499	—	—
Mellawi	87	16	62	60	11	6	1	48	20	9	437	—	251	—	25
Assiut	152	24	128	137	5	5	5	8	129	10	3,745	—	2,252	—	—
Souhag	78	52	26	55	13	6	4	5	41	28	2,245	151	2,562	37	41
Qena	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Aswan	80	35	45	46	18	6	10	—	48	22	42	—	—	—	—
TOTAL	2,702	1,035	1,667	1,879	513	210	100	67	1,766	769	24,998	385	17,644	686	1,610

IES DURING THE YEAR 1951 (continued)

Operations												Refused admission to Sanatorium	Died
Intrapleural Pneumothorax		Internal Pneumonolysis	Phrenic Operations	Extrapleural Pneumothorax		Plombage Oleothorax	Thoracoplasty	Thoracotomy	Pleural Lung Drainage	Bronchoscopy or Bronchography			
Induction	Refills			Induction	Refills								
77	78	79	80	81	82	83	84	85	86	87			
—	3,618	—	—	—	—	—	—	—	—	22	74		
—	3,472	—	—	—	125	—	—	—	—	62	136		
—	3,224	—	—	—	—	—	—	—	—	17	304		
—	—	—	—	—	—	—	—	—	—	—	—		
298	3,701	—	240	—	—	37	—	—	—	28	58		
—	2,211	—	—	—	—	—	—	—	—	38	32		
—	—	—	—	—	—	—	—	—	—	—	—		
39	1,810	—	—	—	—	—	—	—	—	3	28		
15	2,187	—	—	—	—	—	—	—	—	4	52		
17	1,045	—	—	—	—	—	—	—	—	—	70		
—	1,988	—	—	—	—	—	—	—	—	—	84		
66	3,471	—	—	—	—	—	—	—	—	23	16		
578	7,080	—	173	—	—	—	—	—	—	—	52		
194	2,488	—	—	—	—	210	—	—	—	64	87		
—	1,318	—	—	—	—	—	—	—	—	93	22		
51	2,572	—	—	—	—	—	—	—	—	19	42		
64	1,941	—	—	—	—	—	—	—	—	—	51		
45	1,297	—	—	—	—	—	—	—	—	23	96		
43	858	—	—	—	—	—	—	—	—	10	46		
21	951	—	—	—	—	—	—	—	—	35	56		
51	1,244	200	—	—	—	—	—	—	—	13	32		
75	3,252	—	—	—	—	—	—	—	—	—	48		
50	1,583	—	—	—	1	—	—	—	—	7	41		
4	484	—	—	—	—	—	—	—	—	10	27		
42	728	—	—	—	—	13	—	—	—	—	10		
1,654	53,466	200	424	—	126	260	—	—	—	492	1,471		

TABLE NO. 82.—ANNUAL RETURN FOR SANATORIA AND BR

Chest Dispensary			New Cases Seeking Treatment (Dispensary)	(New T.B. Cases in the I									
Main	Branch	T.B. Cases			Other Chest Diseases	From 1-9 Years		From 10-19 Years		M.	F.		
		TOTAL		Sputum +		X. Ray +	M.	F.	M.			F.	
Damanhour	Shubrakhit	918	3	3	—	915	—	—	—	—	—	—	
Alexandria... ..	Rosetta	899	—	—	—	899	—	—	—	—	—	—	
Tanta	Kafr El-Zayat... ..	941	12	9	3	929	—	—	2	—	—	—	
Mansoura	Sinbellawein	1,567	7	4	3	1,560	—	—	2	1	—	—	
Shebin el Kam ... {	Menouf	985	14	6	8	971	—	1	2	—	—	—	
	Benha	1,995	25	17	8	1,970	—	—	2	3	—	—	
Mehalla el Kobra ...	Kafr El Sheikh ...	1,961	17	59	12	1,890	—	—	4	4	—	—	
Damietta	Faraskour	1,521	—	—	—	1,521	—	—	—	—	—	—	
Port-Said	Ismailia	1,260	59	29	30	1,201	3	1	8	3	—	—	
Sherbin {	Dikernes	3,061	29	17	12	3,032	3	1	4	3	—	—	
	Belcas	57	—	—	—	57	—	—	—	—	—	—	
Fayoum	Etsa	456	8	6	2	448	—	1	2	—	—	—	
Minia	Samallout	860	14	—	14	846	—	—	1	—	—	—	
Souhag {	Akhmim	963	4	3	1	957	—	—	—	—	—	—	
	Gerga... ..	1,512	12	8	4	1,497	—	—	—	—	—	—	
Qena {	Luxor	763	92	82	10	671	1	1	2	3	—	—	
	Nag Hammadi ...	805	22	3	19	783	—	—	—	—	—	—	
Aswan... ..	Kom Ombo	181	8	3	5	173	—	—	—	1	—	—	

CHEST DISEASES S

Almaza Sanatorium... ..	2,021	2,021	1,425	596	—	—	—	285	—
Abbassia Chest Diseases Hospital	1,091	1,049	751	298	42	61	58	9	257
Giza Sanatorium	286	286	205	81	—	—	—	46	—
Alexandria Sanatorium	707	707	589	118	—	22	29	82	81
Mehalla el-Kobra Sanatorium... ..	502	502	377	125	—	8	11	57	48
TOTAL	4,607	4,565	3,347	1,218	42	91	98	794	386

	Almaza Sanat.	Abbassia Hosp.	Giza Sanat.	Alexandria Sanat.	Mehalla El Khobra Sanat.	Damanhur	Tanta	Mansoura	Shebin El Kom
No. of Patients on 1st Jan. 1951	793	460	119	106	157	48	16	24	12
No. of Patients Admitted during the year	2021	1091	286	707	502	812	69	47	43
No. of Patients discharged during the year	1939	1046	262	555	487	251	68	46	38
No. of Patients on December 31, 1951...	875	505	143	258	172	109	17	25	17
Average stay in days...	170	167	155	116	95	155	78	145	104

OF CHEST DISEASES DISPENSARIES DURING THE YEAR 1951.

r (New Patients admitted to Sanatorium)

Groups								Professions						(Disp.)		Classes (Sanat.)			
From 30-39 Years		From 40-49 Years		From 50-59 Years		Over 60 Years		Vendors	Officials	Workmen	Peasants	Students	No Occupation	Cases recorded for Sanat	Cases Admitted to Sanat	1st	2nd	3rd Paying	3rd Gratis
I.	F.	M.	F.	M.	F.	M.	F.												
2	—	—	—	—	—	—	—	—	—	1	1	—	1	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1	1	4	—	—	—	—	—	—	—	7	3	—	2	—	—	—	—	—	—
1	—	—	—	—	—	—	—	—	1	—	5	—	1	—	—	—	—	—	—
1	1	1	—	2	—	—	1	—	—	8	4	—	7	1	—	—	—	—	—
6	1	2	1	1	—	—	—	1	2	9	4	—	9	4	—	—	—	—	—
24	2	8	—	—	3	3	—	2	8	19	25	3	14	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
15	2	2	2	2	—	1	—	2	5	25	1	3	23	—	—	—	—	—	—
—	5	2	—	—	1	1	—	—	—	2	13	1	13	2	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
1	3	1	—	—	—	—	—	—	—	—	4	—	4	—	—	—	—	—	—
3	3	1	1	—	1	—	—	—	2	—	2	—	10	—	—	—	—	—	—
—	—	1	—	—	—	—	—	—	1	1	1	—	1	—	—	—	—	—	—
3	1	1	—	2	1	—	—	—	1	4	2	—	9	1	—	—	—	—	—
22	12	12	6	3	3	1	—	6	4	17	34	2	25	—	—	—	—	—	—
15	—	1	—	—	—	—	—	—	3	18	1	—	—	—	—	—	—	—	—
2	—	—	—	—	—	1	—	—	—	—	5	—	3	—	—	—	—	—	—

AND HOSPITALS.

492	—	191	—	76	—	12	—	147	303	992	324	186	69	—	—	26	231	335	1,429
—	174	—	45	—	37	—	8	—	4	3	—	38	1,046	—	—	—	117	129	845
58	—	32	—	12	—	3	—	19	40	175	29	10	13	—	—	—	—	—	286
102	42	57	14	11	2	—	1	17	53	287	21	26	303	—	—	—	3	58	646
71	35	21	8	7	2	4	—	20	37	156	107	25	157	—	—	—	33	15	454
23	251	301	67	106	41	19	9	203	437	1,613	481	285	1,588	—	—	26	384	537	3,660

within Dispensaries

Damietta	Port-Said	Sherbin	Zifta	Suez	Fayoum	Beni Suef	Minia	Mansoura	Assiut	Souhag	Aswan
141	120	—	23	46	30	23	16	35	67	23	21
879	540	—	88	66	85	75	58	78	139	76	78
868	525	—	85	68	90	76	54	78	152	78	80
154	135	—	26	44	25	22	20	35	54	21	19
79	90	—	87	235	130	141	107	130	151	89	165

TABLE No. 82.—ANNUAL RETURN FOR SANATORIA AND BRANCHES

Chest Dispensary		New Contacts (Disp.)			Cases under Observation (Disp.)	Hæmoptysis	Sputum Examination				
Main	Branch	Children	Adults	T.B. Contacts			TOTAL OF SPUTUM	Sputum of New Cases		Sputum of Old Cases	
								No.	Pos.	No.	Pos.
Damanhour... ..	Shubrakhit	—	—	—	—	—	32	3	3	29	1
Alexandria... ..	Rosetta	—	—	—	—	—	—	—	—	—	—
Tanta	Kafr El-Zayat... ..	—	—	—	2	—	25	24	9	1	—
Mansoura	Sinbellawein	—	—	—	—	—	7	7	4	—	—
Shebin el Kom ...	Menouf	—	—	—	1	—	16	16	6	—	—
	Benha	—	—	—	2	—	25	25	17	—	—
Mehalla el Kobra ...	Kafr El Sheikh ...	8	15	—	—	—	74	69	59	5	—
Damietta	Faraskour... ..	—	—	—	—	—	—	—	—	—	—
Port-Said	Ismailia	—	—	—	—	—	57	56	29	1	—
Sherbin	Dikernes	7	9	1	—	—	51	41	17	10	—
	Belcas	—	—	—	—	—	—	—	—	—	—
Fayoum	Etsa	—	—	—	—	—	8	8	6	—	—
Minia	Samallout... ..	—	—	—	—	—	—	—	—	—	—
Souhag	Akhmim	5	4	—	2	—	8	4	3	4	—
	Gerga... ..	5	4	—	3	—	14	14	8	—	—
Qena	Luxor	—	1	—	2	—	98	96	82	2	—
	Nag-Hammadi ...	—	—	—	—	—	19	19	3	—	—
Aswan	Kom Ombo	—	—	—	—	—	—	—	—	—	—

CHEST DISEASES SANATORIA

Almaza Sanatorium	—	—	—	—	1,313	8,881	2,021	1425	6,850	2,635
Abbassia Chest Diseases Hospital	—	—	—	—	190	4,373	1,091	751	3,282	1,222
Giza Sanatorium	—	—	—	—	382	1,030	286	205	744	367
Alexandria Sanatorium	—	—	—	—	319	3,369	675	589	2,694	1,144
Mehalla el-Kobra Sanatorium	—	—	—	—	152	2,471	502	377	1,969	995
TOTAL	—	—	—	—	2,356	20,114	4,575	3,347	15,539	6,344

CHEST DISEASES DISPENSARIES DURING THE YEAR 1951 (continued)

X-Ray Examination						Exam. of (Sanat.)				Old Cases (Disp.)					Visits(Disp.)	
New Cases		Old Patients			Teeth	Nose	Throat	Ears	TOTAL	T.B. Cases	Under Observation	Contacts	Other Chest Diseases	Nurse Visits	M.O. Visits	
		Pos.	Under Observ.													
No.	Pos.	No.	No.	Pos.												
15	3	3	12	—	—	—	—	—	1-045	206	23	11	805	102	102	
	—	—	—	—	—	—	—	—	95	95	—	—	—	124	109	
11	11	9	—	—	—	—	—	—	678	371	—	—	307	72	86	
	—	—	—	—	—	—	—	—	6	—	—	—	6	294	133	
3	3	3	—	—	—	—	—	—	392	141	74	1	176	80	73	
3	3	3	—	—	—	—	—	—	475	197	70	—	188	83	33	
	—	—	—	—	—	—	—	—	1,113	818	72	45	178	192	192	
	—	—	—	—	—	—	—	—	709	—	—	—	709	463	214	
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
	—	—	—	—	—	—	—	—	644	307	48	32	257	84	84	
	—	—	—	—	—	—	—	—	7	4	—	—	3	10	10	
	—	—	—	—	—	—	—	—	182	24	—	—	158	336	336	
	—	—	—	—	—	—	—	—	1-127	106	73	59	884	106	31	
6	6	1	—	—	—	—	—	—	613	71	2	—	540	31	31	
11	11	9	—	—	—	—	—	—	932	301	11	12	608	86	83	
45	43	34	2	—	—	—	—	—	1-030	406	9	9	606	30	60	
	—	—	—	—	—	—	—	—	567	185	1	11	370	—	—	
	—	—	—	—	—	—	—	—	181	42	—	—	139	—	—	

HOSPITALS (continued)

23	93	933	3,390	—	—	560	524	623	512	—	—	—	—	—	—	—
25	795	725	1,354	176	—	439	567	567	567	—	—	—	—	—	—	—
28	151	150	377	—	—	67	59	71	58	—	—	—	—	—	—	—
56	614	614	1,242	—	—	—	—	—	—	—	—	—	—	—	—	—
82	379	370	577	26	—	385	283	408	299	—	—	—	—	—	—	—
14	2,872	2,792	6,940	202	—	1451	1433	1669	1436	—	—	—	—	—	—	—

TABLE NO. 82.—ANNUAL RETURN FOR SANATORIA AND BRANCHES

Chest Dispensary		Discharged Patients								
Main	Branch	TOTAL	Sputum on Discharge		Improved	Stationary	Worse	Died	Ability of	
			Pos.	Neg.					Complete	Partial
Damanhour	Shubrakhit	—	—	—	—	—	—	—	—	—
Alexandria	Rosetta	—	—	—	—	—	—	—	—	—
Tanta... ..	Kafr El-Zayat... ..	—	—	—	—	—	—	—	—	—
Mansoura	Sinbellawein	—	—	—	—	—	—	—	—	—
Shebin el Kom...	Menouf	—	—	—	—	—	—	—	—	—
	Benha	—	—	—	—	—	—	—	—	—
Mehalla el Kobra ...	Kafr El Sheikh ...	—	—	—	—	—	—	—	—	—
Damietta	Faraskour... ..	—	—	—	—	—	—	—	—	—
Port-Said	Ismailla	—	—	—	—	—	—	—	—	—
Sherbin	Dikernes	—	—	—	—	—	—	—	—	—
	Belcas	—	—	—	—	—	—	—	—	—
Fayoum	Etsa	—	—	—	—	—	—	—	—	—
Minia	Samallout	—	—	—	—	—	—	—	—	—
Souhag	Awhmim	—	—	—	—	—	—	—	—	—
	Girga	—	—	—	—	—	—	—	—	—
Qena	Luxor	—	—	—	—	—	—	—	—	—
	Nag-Hammadi ...	—	—	—	—	—	—	—	—	—
Aswan	Kom Ombo	—	—	—	—	—	—	—	—	—

CHEST DISEASES SANATORIA

Almaza Sanatorium... ..	1,939	877	1062	1,349	334	86	170	5	1,306
Abbassia Chest Disease Hospital	1,046	607	439	667	257	47	75	22	404
Giza Sanatorium	262	137	125	122	61	22	57	3	122
Alexandria Sanatorium	555	350	205	273	192	46	44	15	273
Mehalla el-Kobra Sanatorium	487	246	241	334	81	60	12	19	233
TOTAL	4,289	2,217	2072	2,745	925	261	358	64	2,422

ST DISEASES DISPENSARIES DURING THE YEAR 1951 (continued)

Treatment				Operations													
Gold	Other Injections	Exercise Treatment	General Treatment	Aspirations	Intrapleural Pneumothorax		Internal pneumonolysis	Phrenic Operations	Extrapleural Pneumothorax		Plombage, Oleothorax	Thoracoplasty	Thoracotomy	Pleural { Drainage Lung }	Bronchoscopy or Bronchography	Drainage	Other Operations
					Inductions	Refills			Induction	Refills							
—	—	—	—	—	—	44	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	

HOSPITALS (continued)

—	13,315	140	735	974	1,523	10,525	665	601	6	—	—	87	2	22	44	5	58
—	10,879	471	5,115	203	215	5,728	279	209	—	—	—	29	1	5	28	—	4
—	2,893	12	123	187	353	2,659	—	—	—	—	—	—	—	—	—	—	—
—	3,839	79	176	265	284	5,062	—	34	—	—	—	—	—	—	—	—	—
—	1,153	163	324	199	315	3,549	—	27	—	—	321	—	—	—	—	—	—
—	32,019	865	6,473	1,828	2,630	27,523	944	931	6	—	321	116	3	27	72	5	62

TABLE No. 83.—MASS RADIOGRAPHY SURVEY BY MOBILE UNIT

Month	Total No. Exam.	Result of Exam.			Less than 5 years						From 5-15 years						From 15-30 years						From 30-50 years					
		Pos.	Susp.	Neg.	M.			F.			M.			F.			M.			F.			M.			F.		
					+	?	-	+	?	-	+	?	-	+	?	-	+	?	-	+	?	-	+	?	-	+	?	-
January	1,009	—	5	1,004	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
February	1,549	—	30	1,519	—	—	14	—	5	—	11	124	—	99	—	7	482	—	21	—	8	627	—	13	—	—	—	
March	3,637	—	47	3,590	—	—	13	—	3	—	—	36	—	58	—	11	1,286	—	4	—	30	1,918	—	—	—	—	—	
April	6,503	—	57	6,446	—	—	—	—	22	—	—	59	—	37	—	22	2,329	—	26	—	30	3,116	—	—	—	—	—	
May	236	—	3	233	—	—	—	—	—	—	—	—	—	—	—	1	35	—	—	—	2	100	—	—	—	—	—	
June ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
July ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
August ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
September ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
October	980	14	66	900	—	1	39	—	1	50	—	9	135	1	6	173	2	88	2	2	13	114	2	16	135	—		
November	2,240	17	115	2,108	—	—	—	—	—	—	2	26	383	—	—	—	15	1,689	—	—	—	34	—	—	—	—		
December	3,702	19	5	3,678	—	—	—	—	—	—	—	—	—	—	—	—	19	3,678	—	—	—	—	—	—	—	—		
TOTAL	19,856	50	328	19,478	—	1	66	—	1	80	2	46	947	1	11	975	36	143	9,598	2	83	5,922	2	16	158	—		

Work was stopped from 2-5-1951 to 13-10-1951 as apparatus was out of order

TABLE No. 83 (contd.)

Month	AGE GROUPS						PROFESSIONS																						
	50 years and over						Employees			Students			Workmen			Farmers			Food Vendors			Other Vendors			No Occupation				
	M.		F.				+		?		-		+		?		-		+		?		-		+		?		-
January	-	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
February	-	4	138	-	-	2	-	-	17	-	11	255	-	19	1,231	-	-	-	-	-	2	-	-	-	-	-	-	-	14
March	-	5	258	-	1	3	-	-	29	-	-	71	-	47	3,479	-	-	-	-	-	-	-	-	-	-	-	-	11	
April	-	5	857	-	-	-	-	-	86	-	-	15	-	57	6,235	-	-	-	-	-	-	-	-	-	-	-	-	110	
May	-	-	98	-	-	-	-	-	5	-	-	-	-	3	228	-	-	-	-	-	-	-	-	-	-	-	-	-	
June	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
July	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
August	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
September	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
October	5	3	42	-	7	33	-	3	34	1	4	116	3	5	45	4	17	125	-	-	18	-	1	13	6	36	549	-	
November	-	-	2	-	-	-	-	-	-	17	115	2,108	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
December	-	-	-	-	-	-	1	2	495	-	-	12	3	-	567	14	3	2,445	-	-	141	1	-	17	-	-	1	-	
TOTAL	5	17	1,397	-	8	38	1	5	701	18	135	3,535	6	131	11,796	18	20	2,570	-	-	161	1	1	30	6	36	684	-	

Work was stopped from 2-5-1951 to 13-10-1951 as apparatus was out of order.

Work was stopped from 2-5-1951 to 13-10-1951 as apparatus was out of order.

TABLE No. 83.— (Contd.)

Month	Race			Religion												Large Films								Sputum Exam			Transferred to Sanatoria
	White		Dark	Moslem			Christian			Jew			Others			No. of Films	Positive	Bronchiectasis	Fibrosis	Effusion	Non T.B.	Negative	Positive	Negative	Not Examined		
	Total	+	Total	+	?	—	+	?	—	+	?	—	+	?	—												
January	1,009	—	—	—	5	913	—	—	91	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
February	1,549	—	—	—	30	1,492	—	—	27	—	—	—	—	—	—	16	5	—	—	7	4	2	14	1	2		
March	3,637	—	—	—	46	3,404	—	1	179	—	7	—	—	—	—	45	24	—	—	15	6	8	36	1	—		
April	6,503	—	—	—	57	6,110	—	—	336	—	—	—	—	—	—	52	38	—	—	1	13	8	29	10	—		
May	236	—	—	—	3	218	—	—	15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
June	}																										
July	}																										
August	}																										
September	}																										
October	980	14	—	—	14	900	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
November	2,240	17	—	—	17	2,108	—	—	—	—	—	—	—	—	—	36	9	—	—	—	47	—	—	—	9		
December	3,702	19	—	—	19	3,528	—	1	150	—	—	—	—	—	—	55	13	11	2	26	—	—	—	—	—		
TOTAL	19,856	50	—	—	50	18,673	—	2	798	—	7	—	—	—	—	224	89	11	1	2	2	49	70	18	79	12	11

Work was stopped from 2-5-1951 to 13-10-1951 as apparatus was out of order

Work was stopped from 2-5-1951 to 13-10-1951 as apparatus was out of order

Chapter XIII.—Venereal and Skin Diseases

The total number of new patients attending venereal and skin diseases units and Cairo and Alexandria hospitals during the year was 277,263 as compared with 270,188 new patients during the preceding year or 7,075 more patients than in 1950.

This is indicative of the public's appreciation of the services these units render throughout the country.

Gonorrhoea :

According to tables Nos. 87 and 93 a total of 3,435 patients were found suffering from acute gonorrhoea as against 3,472 in 1950.

The introduction of penicillin and sulpha compounds in treatment has rendered the cure of gonorrhoea possible in one day.

Syphilis :

According to tables Nos. 86 and 92, a total of 1,658 patients were found suffering from primary syphilis as against 1,815 in the previous year.

The use of penicillin procain in oil with 2% aluminium monostearate in the treatment of syphilis has given gratifying results.

Other Venereal Diseases :

A total of 3,192 patients suffered from other venereal diseases as against 3,770 in the previous year.

Technical Works :

Every propaganda means is employed to demonstrate to the public the great evils of venereal diseases.

Penicillin procain has proved effective in the treatment of gonorrhoea and syphilis. This is seen from the falling number of patients attending V.D. units.

Great strides have been made in the control of favus, a wide spread disease particularly among elementary and primary school pupils. X Ray apparatus for the treatment of this diseases have been installed in 26 V.D. units and operated as from September 1950. 7,385 cases of favus have been so treated during the year. No complications were encountered. It is hoped that when all V.D. units throughout the country are equipped with X Ray apparatus, this disease will be stamped out.

Scabies, another wide-spread disease, has been successfully treated by Benzyl Benzoate. This drug has been supplied to all V.D. units and to some 100 rural health centres. Besides, there are two mobile units, one in Minia and another in Sharkia, for the treatment of this disease.

Hod el Marsoud Hospital in Cairo (now called Sayeda Zeinab hospital) and Gabbary hospital, in Alexandria, lock hospitals until 1949, have since that date been converted into venereal diseases hospitals with in-patient accommodation for syphilis and other venereal diseases patients. Each has a special section for the treatment of scabies. A separate section is also provided to accommodate arrested women sent by the police for treatment.

Every endeavour is made to increase the number of units. There are now 41 units in operation beside the hospitals in Cairo and Alexandria.

The venereal diseases prophylactic centre near Ezbekia Gardens provides protection to persons exposed to infection. A special venereal diseases medical officer is in charge of the centre in addition to his other duties.

The W.H.O. venereal diseases demonstration team has this year started its activities in conjunction with the Ministry. These covered Tanta town and surrounding villages and Mehalla el Kobra town. Several thousand people have been surveyed. Some 3% suffered from syphilis. A full report will be submitted on completion of its investigation.

TABLE No. 85.—EXPENDITURES DURING 1951.

	Salaries		Equipment		Instrs. and Medicine		Diet		Sundry Expenses		Total Expenditure	
	L.E.	Mms.	L.E.	Mms.	L.E.	Mms.	L.E.	Mms.	L.E.	Mms.	L.E.	Mms.
Cairo Hosp.	5,572	820	469	992	962	270	732	536	173	892	7,911	510
Alex. Hosp.	3,354	301	117	560	279	176	2,312	875	261	949	6,325	861
TOTAL ...	8,927	121	587	552	1,241	446	3,045	411	435	841	14,237	371

TABLE No. 86.—NEW CASES OF SYPHILIS IN VENEREAL DISEASES
HOSPITALS DURING 1951

	EARLY CASES						LATE CASES						Herd		TOTAL	
	Primary		Second		TOTAL		Tert.		Latent		Nervous		M.	F.	M.	F.
	M.	F.		F.	M.	F.	M.	F.	M.	F.	M.	F.				
Cairo Hospital ...	10	2	16	20	26	22	4	2	20	33	2	3	5	6	57	66
Alexandria Hosp.	12	11	14	12	26	23	4	3	28	564	1	1	12	13	71	604
TOTAL... ..	22	13	30	32	52	45	8	5	48	597	3	4	17	19	128	670

TABLE No. 87.—NEW CASES OF GONORRHOEA DURING 1951

	Acute		Chronic		TOTAL	
	M.	F.	M.	F.	M.	F.
Cairo Hospital ...	69	18	19	27	88	45
Alexandria Hosp. ...	42	27	—	80	42	107
TOTAL	111	45	19	107	130	152

TABLE NO. 88.—INFECTED CONTACTS

	Syph.		Gon.	
	M.	F.	M.	F.
Cairo Hospital ...	11	3	12	19
Alexandria Hospital...	—	—	—	—
TOTAL ...	11	3	12	19

TABLE NO. 89.—CURED CASES OF VENEREAL DISEASES DURING 1951

	OUT-PATIENTS				IN-PATIENTS			
	Syph.		Gon.		Syph.		Gon.	
Cairo Hospital ...	2	—	86	36	2	4	2	9
Alexandria Hosp. ...	39	72	40	29	12	472	1	57
TOTAL ...	41	72	126	65	14	476	3	66

TABLE NO. 90.—CURED CASES OF SKIN DISEASES

	Scabies		Favus	
	M.	F.	M.	F.
Cairo Hospital ...	158	322	254	140
Alexandria Hospital...	402	569	152	146
TOTAL ...	560	891	406	286

TABLE NO. 91.—NEW CASES AND VISITS TO THE S

LOCALITY OF CLINIC	NEW CASES									
	Syphilis		Gonorrhoea		Skin Dis.		Other Dis.		TOTAL	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Shubra	102	79	209	32	2,870	12,111	58	143	3,239	12,111
Boulaq	109	87	204	148	3,099	346	5	4	3,417	346
Sayeda Zeinab	81	67	215	145	3,459	4,618	93	3	3,848	4,618
Gamalia	142	83	544	190	997	2,234	22	145	1,705	2,234
Khalifa	18	25	37	59	2,229	7,982	—	—	2,284	7,982
Abbassia	88	60	120	50	2,297	4,624	19	14	2,534	4,624
Heliopolis	40	23	69	11	1,436	3,649	—	—	1,545	3,649
Old Cairo	11	18	32	52	1,408	2,792	4	56	1,455	2,792
Giza... ..	35	73	60	4	1,332	3,680	1	1	1,428	3,680
No.1 Alexandria Municipality	170	188	150	69	924	548	25	13	1,269	548
„ 2 „ „	131	265	165	83	2,333	2,511	14	4	2,643	2,511
„ 3 „ „	77	99	58	35	1,023	1,353	14	2	1,172	1,353
Port-Said	36	71	39	7	1,630	2,281	—	—	1,705	2,281
Port Said Health Centre ...	51	94	15	35	1,858	2,769	139	306	2,063	2,769
Ismailia	59	133	29	7	1,176	2,117	—	14	1,264	2,117
Suez... ..	74	77	115	76	3,715	4,928	76	514	3,980	4,928
Damietta	170	277	17	—	3,308	6,386	—	—	5,495	6,386
Benha	53	52	94	100	2,332	2,441	6	7	2,485	2,441
Shebin el Kom	52	45	25	14	4,390	7,753	—	—	4,467	7,753
Menouf	14	20	2	—	1,806	4,752	—	—	1,822	4,752
Tanta	33	70	28	2	3,276	3,920	1	—	3,338	3,920
Mehalla el Kobra	67	111	14	12	2,969	3,942	—	—	3,050	3,942
Kafr el Zayat	92	180	27	14	2,129	2,526	—	—	2,248	2,526
Mansoura	131	204	26	5	2,829	3,574	20	521	3,006	3,574
Mit Ghamr	106	232	2	5	2,729	3,085	—	1	2,837	3,085
Damanhour	68	78	64	102	3,209	8,799	—	—	3,341	8,799
Kafr el Dawar	26	41	23	18	1,482	2,431	—	6	1,531	2,431
Zagazig	56	93	47	18	3,492	3,636	5	1	3,601	3,636
Facous	54	81	6	7	1,139	1,505	—	—	1,199	1,505
Fayoum	188	312	56	8	2,182	2,777	—	—	2,425	2,777
Sennouris	28	48	21	26	1,018	1,863	18	4	1,085	1,863
Beni Suef	48	70	45	4	3,063	3,128	2	—	3,158	3,128
Minia	86	109	71	—	1,766	2,183	—	—	1,923	2,183
Samalout	27	59	3	2	1,868	1,309	63	150	961	1,309
Assiut	182	363	33	1	1,685	3,506	—	2	1,900	3,506
Deirout	52	75	—	—	3,175	4,537	—	2	3,227	4,537
Gerga	121	146	28	8	5,053	9,765	—	—	5,262	9,765
Tahta	171	252	1	—	1,024	3,149	—	—	1,196	3,149
Suhag	176	221	9	—	1,337	1,362	—	—	1,492	1,362
Qena	29	25	8	5	2,119	2,897	—	3	2,156	2,897
Nag Hammadi	62	152	26	2	837	1,010	—	—	925	1,010
Luxor	72	77	42	2	587	1,264	—	—	701	1,264
Aswan	6	86	56	16	687	222	18	5	842	222
TOTAL	3,409	4,878	2,785	1,370	90,945	152,699	598	1,920	97,737	160,646

VENEREAL DISEASES CLINICS DURING THE YEAR 1951

NUMBER OF VISITS

Syphilis		Gonorrhoea		Skin Dis.		Other Dis.		TOTAL	
M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
3,515	4,165	250	219	889	2,047	378	610	5,032	7,041
11,629	12,078	3,031	1,709	3,193	3,178	175	73	18,028	17,047
3,614	6,753	26	356	1,269	5,544	32	—	4,941	12,653
6,117	6,312	736	568	578	891	48	315	7,479	8,086
437	722	20	20	583	3,026	—	—	1,040	3,774
1,815	2,199	90	35	673	1,935	—	—	2,578	4,169
648	452	31	19	1,150	2,046	—	—	1,829	2,535
662	1,132	138	269	247	1,388	8	11	1,055	2,960
1,476	3,714	60	4	454	1,295	1	4	1,991	5,017
—	—	—	—	—	—	—	—	29,893	52,582
—	—	—	—	—	—	—	—	24,085	37,976
—	—	—	—	—	—	—	—	16,156	25,092
1,152	2,586	58	13	667	945	—	—	1,877	3,544
1,114	2,983	24	62	844	1,286	195	300	2,177	4,631
597	1,464	65	15	549	1,198	—	—	1,211	2,677
1,639	4,204	426	429	1,257	1,363	118	417	3,440	6,710
3,018	6,585	30	—	807	1,735	—	—	3,855	8,320
527	931	155	115	1,486	2,777	—	—	2,168	3,823
2,586	2,041	86	42	2,223	2,531	—	—	4,895	4,614
991	1,653	6	—	1,068	2,201	—	—	2,065	3,854
1,180	2,591	59	4	1,338	1,854	2	—	2,579	4,449
1,318	4,100	12	9	957	2,165	—	—	2,287	6,274
3,179	5,765	30	23	1,253	1,152	—	—	4,462	6,940
3,113	5,243	41	15	665	782	—	—	3,819	6,040
2,385	6,148	8	15	463	480	—	—	2,856	6,643
1,681	2,241	216	169	1,978	4,046	—	—	3,875	6,456
616	1,438	39	10	911	1,016	—	—	1,566	2,464
780	1,922	72	27	1,456	1,022	9	—	2,317	2,971
1,136	2,648	14	14	935	1,434	—	—	2,085	4,096
4,833	11,126	—	—	535	707	—	—	5,368	11,833
1,086	2,265	37	64	614	1,191	35	17	1,802	3,537
2,234	4,966	89	9	965	1,072	—	—	3,288	6,047
4,273	6,352	214	—	1,219	1,655	—	—	5,706	8,007
1,987	5,532	2	2	460	543	28	103	2,477	6,180
6,398	16,441	2	—	1,178	2,294	—	4	7,578	18,739
2,187	5,536	—	—	2,010	2,930	—	—	4,197	8,526
3,987	6,529	53	10	1,463	1,289	—	—	5,503	7,828
2,250	5,127	1	—	63	119	—	—	2,314	5,246
6,884	9,990	8	—	498	390	—	—	7,390	10,380
1,131	3,468	20	17	454	1,007	—	3	1,605	4,495
2,441	8,903	48	1	229	258	—	—	2,718	9,162
2,427	5,235	151	11	466	719	—	—	3,044	5,965
1,552	5,128	126	46	353	662	—	—	2,031	5,836
00,595	188,668	6,474	4,32	38,430	64,360	1,029	2,154	213,762	375,159

TABLE NO. 92.—CASES OF SYPHILIS IN VENEREAL DISEASES CLINICS DURING 1951

Locality of Clinic	ACUTE SYPHILIS						OTHER STAGES								TOTAL	
	Primary		Second.		TOTAL		Tert.		Latent		Nervous		Herd.			
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Shubra	18	2	13	6	31	8	9	8	52	47	2	—	8	16	102	79
Boulaq	15	2	31	14	46	16	4	—	52	64	7	7	—	—	109	87
Sayeda Zeinab ...	23	2	10	12	33	14	6	12	31	29	3	—	8	12	81	67
Gamalia	46	8	33	21	79	29	2	2	60	47	—	—	1	5	142	83
Khalifa	3	3	4	3	7	6	4	—	2	14	2	—	3	5	18	25
Abbassia... ..	28	18	18	15	46	33	4	2	33	25	—	—	5	—	88	60
Heliopolis	10	2	7	8	17	10	3	3	16	8	1	—	3	2	40	23
Old Cairo	1	—	2	6	3	6	2	1	6	11	—	—	—	—	11	18
Giza	9	1	6	9	15	10	5	10	11	42	—	—	4	11	35	73
No. 1. Alex. Municipality	11	1	26	18	37	19	53	25	66	135	3	3	11	6	170	188
„ 2 „ „	4	—	25	20	29	20	10	15	67	211	6	6	19	13	131	265
„ 3 „ „	10	—	14	17	24	17	11	15	40	66	2	1	—	—	77	99
Port-Said	2	—	9	11	11	11	5	4	11	43	1	3	8	10	36	71
Port Said Health Centre	—	—	12	9	12	9	—	—	26	76	2	—	11	9	51	94
Ismailia	7	—	11	9	18	9	—	—	34	108	—	—	7	16	59	133
Suez	1	1	11	1	16	2	7	5	27	63	6	—	18	7	74	77
Damietta	6	8	7	6	13	14	9	6	103	198	13	4	32	55	170	277
Benha	7	4	3	2	10	6	7	2	29	41	—	—	7	3	53	52
Shebin el Kom ...	1	1	9	6	10	7	4	2	27	32	—	—	11	4	52	45
Menouf	—	—	1	3	1	3	5	4	7	12	—	—	1	1	14	20
Tanta	4	—	4	1	8	1	2	3	16	55	—	—	7	11	33	70
Mehalla el Kobra..	5	2	8	10	13	12	13	8	11	65	1	—	29	26	67	111
Kafr el Zayat ...	1	—	—	5	1	5	2	1	79	168	—	—	10	6	92	180
Mansoura	2	1	6	5	8	6	11	8	84	166	—	—	28	24	131	204
Mit Ghamr	—	—	14	35	14	35	2	1	48	143	—	—	42	53	106	232
Damanhour	11	—	7	7	18	7	9	8	29	56	2	—	10	7	68	78
Kafr el Dawar ...	4	—	6	4	10	4	—	10	15	25	—	—	1	2	26	41
Zagazig	10	3	15	35	25	38	11	14	10	33	—	—	10	8	56	93
Faccous	—	—	17	25	17	25	—	1	18	28	—	—	19	27	54	81
Fayoum	8	—	5	4	13	4	13	6	144	274	—	—	18	28	188	312
Sennouris	—	—	8	9	8	9	2	4	12	27	—	—	6	8	28	48
Beni Suef	8	2	3	3	11	5	11	3	16	54	—	—	10	8	48	70
Minia	—	1	8	4	8	5	7	12	60	75	1	1	10	16	86	109
Samalout	1	2	8	8	9	10	3	2	12	45	—	—	3	2	27	59
Assiut	10	1	13	6	23	7	2	5	125	290	—	—	32	61	182	363
Deirout	—	1	1	6	1	7	5	3	41	57	—	—	5	8	52	75
Gerga	20	8	76	126	96	134	3	3	12	21	3	—	7	18	121	176
Tahta	1	—	37	42	38	42	8	7	78	162	3	1	44	40	171	252
Suhag	1	—	13	15	14	15	7	14	109	179	1	1	15	12	146	221
Qena	3	—	3	4	6	4	3	1	9	16	—	—	11	4	29	25
Nag' Hammadi ...	2	—	12	19	14	19	17	23	15	73	1	—	15	37	62	152
Luxor	34	9	7	12	41	21	4	3	18	47	—	—	9	6	72	77
Aswan	17	—	16	10	33	10	5	3	21	48	1	—	26	25	86	86
TOTAL	348	83	539	591	887	674	290	259	1682	3379	61	27	524	612	3444	4951

TABLE No. 93.—NEW CASES OF GONORRHOEA IN VENEREAL DISEASES
CLINICS DURING THE YEAR 1951

Locality of Clinic	Acute		Chronic		TOTAL	
	M.	F.	M.	F.	M.	F.
Shubra	197	32	12	—	209	32
Boulaq	76	3	128	145	204	148
Sayeda Zeinab	212	13	3	132	215	145
Gamalia	505	188	39	2	544	190
Khalifa	29	8	8	51	37	59
Abbassia	129	50	1	—	130	50
Heliopolis	69	11	—	—	69	11
Old Cairo	25	49	7	3	32	52
Giza	50	4	10	—	60	4
No. 1 Alex. Municipality	91	23	59	46	150	69
„ 2 „ „	107	26	58	57	165	83
„ 3 „ „	42	16	16	19	58	35
Port-Said	37	6	2	1	39	7
Port-Said Health Centre	15	35	—	—	15	35
Ismailia	29	5	—	2	29	7
Suez	103	76	12	—	115	76
Damietta	11	—	6	—	17	—
Benha	94	100	—	—	94	100
Shebin el Kom	24	14	1	—	25	14
Menouf	2	—	—	—	2	—
Tanta	13	2	15	—	28	2
Mehalla el Kobra	14	12	—	—	14	12
Kafr el Zayat	19	6	8	8	27	14
Mansoura	26	5	—	—	26	5
Mit Ghamr	2	4	—	1	2	5
Damanhour	43	102	21	—	64	102
Kafr el Dawar	17	14	6	4	23	18
Zagazig	47	18	—	—	47	18
Faccous	6	7	—	—	6	7
Fayoum	48	5	8	3	56	8
Sennouris	19	26	2	—	21	26
Beni Suef	33	4	12	45	45	4
Minia	71	—	—	—	71	—
Samalout	3	2	—	—	3	2
Assiut	33	1	—	—	33	1
Deirout	—	—	—	—	—	—
Gerga	26	8	2	—	28	8
Tahta	1	—	—	—	1	—
Souhag	9	—	—	—	9	—
Qena	5	3	3	2	8	5
Naga Hammadi	25	2	1	—	26	2
Luxor	34	2	8	—	42	2
Aswan	46	10	10	6	56	16
TOTAL	2,387	892	458	482	2,845	1,374

TABLE No. 94. —CURED CASES IN VENEREAL DISEASES CLINICS
DURING THE YEAR 1951

Locality of Clinic	Cured Cases			
	Syphilis		Gonorrhoea	
	M.	F.	M.	F.
Shoubra	10	10	224	75
Boulaq	222	211	182	117
Sayeda Zeinab	12	18	204	100
Gamalia	23	10	484	176
Khalifa	—	—	29	8
Abbassia	1	1	120	50
Heliopolis	—	1	66	15
Old Cairo	3	—	14	30
Giza	26	29	59	3
No. 1 Alex. Municipality	—	—	37	14
„ 2 „ „	2	2	47	21
„ 3 „ „	—	—	15	8
Port-Said	5	10	13	4
Port Said Health Centre	2	6	8	29
Ismailia Clinic	—	—	29	7
Suez „	35	57	43	35
Damietta „	42	54	8	—
Benha „	—	—	86	93
Shebin el Kom „	—	—	7	6
Menouf „	—	—	—	—
Tanta „	—	—	12	2
Mehalla el Kobra „	16	18	10	11
Kafr el Zayat „	14	22	25	15
Mansoura „	19	61	25	5
Mit Ghamr „	—	—	—	—
Damanhour „	6	1	39	44
Kafr el Dawar „	1	2	14	7
Zagazig „	14	19	29	12
Faccous „	12	19	6	7
Fayoum „	—	—	54	8
Sennouris „	1	6	19	26
Beni Suef „	7	1	31	1
Minia „	15	27	71	—
Samalout „	—	—	3	2
Assiut „	—	—	33	1
Deirout „	—	—	—	—
Gerga „	24	72	28	8
Tahta „	25	40	1	—
Souhag „	1	10	7	—
Qena „	13	25	8	2
Nag Hammadi „	—	—	4	—
Luxor „	—	—	—	—
Aswan „	2	17	48	6
TOTAL	553	749	2,142	948

TABLE No. 95.—CASES OF FAVUS
TREATED BY X RAYS DURING 1951

Units	Cases	
	M.	F.
Shubra Clinic	199	184
Sayed Zeinab Clinic ' ...	413	408
Cairo Hospital	254	140
Khalifa Clinic	210	248
Abbassia Clinic	301	268
Heliopolis Clinic	339	265
Port-Said Health Centre ...	33	62
Ismailia Clinic	27	26
Suez Clinic	118	714
Damietta Clinic	111	37
Alexandria Hospital	152	146
Mansoura Clinic	124	78
Shebin el Kom Clinic ...	267	129
Zagazig Clinic	171	88
Benha Clinic	412	178
Giza Clinic	288	186
Beni Suef Clinic	153	65
Minia Clinic	108	107
Assiut Clinic	94	40
Souhag Clinic	116	49
Qena Clinic	23	11
Aswan Clinic	33	10
TOTAL	3,946	3,439

TABLE NO. 96.—NEW CASES OF SCABIES
DURING THE YEAR 1951

Locality of Clinic	New Scabies	
	M.	F.
Shubra	237	645
Boulaq	644	758
Sayeda Zeinab	102	146
Gamalia	182	245
Khalifa	191	192
Abbassia	207	338
Heliopolis	102	186
Old Cairo	157	190
Giza	42	92
No. 1 Alexandria Municipality	87	48
" 2 " "	826	968
" 3 " "	166	164
Port-Said	93	80
Port Said Health Centre ...	93	137
Ismailia	68	40
Suez	111	87
Damietta	224	312
Benha	390	388
Shebin el Kom	1,842	1,859
Menouf	55	149
Tanta	61	34
Mehalla el Kobra	213	237
Kafr el Zayat	99	117
Mansoura	140	191
Mit Ghamr... ..	233	238
Damanhour	276	268
Kafr el Dawar	84	98
Zagazig	371	346
Faccous	197	209
Fayoum	291	282
Sennouris	107	170
Beni Suef	241	166
Minia	123	164
Samalout	112	155
Assiut	365	698
Deirout	190	236
Gerga	198	351
Tahta	140	189
Souhag	81	52
Qena	111	136
Nag Hammadi	110	107
Luxor	107	215
Aswan	78	119
TOTAL	9,947	11,802

TABLE No. 97.—NEW CASES AND NUMBER
OF VISITS TO THE MOBILE UNIT AT IBRAHIMIA
DURING 1951

New Cases		Number of Visits	
M.	F.	M.	F.
393	456	142	186

TABLE No. 98.—FULL DETAILS

Unit	Scabies				Other Skin Dis.	
	New Cases		Cured Cases		M.	F.
	M.	F.	M.	F.		
Ibrahimia	39	32	24	20	454	424

TABLE No. 99.—NEW CASES AND VISITS TO SCABIES
TREATMENT BATH DURING THE YEAR 1951

New Cases		Number of Visits	
M.	F.	M.	F.
1,860	1,404	3,264	6,012

TABLE No. 100.—HOSPITALS AND CLINICS FROM
WHICH CASES OF SCABIES WERE FORWARDED
DURING 1951.

District	Patients	
	M.	F.
Shubra Clinic	969	953
Sayedra Zeinab Clinic ...	26	16
Gamalia „ ...	103	87
Abbassia „ ...	61	63
Giza „ ...	49	30
Boulaq Health Centre ...	171	234
Malek Hospital	12	11
Demerdash „	2	—
School Hygiene Dept. ...	15	4
Auxiliary Police Barracks	197	—
Other Units	255	6
TOTAL	1,860	1,404

Chapter XIV—Mental Health

Number of Patients :

The number of patients remaining on 1st January 1951 in both mental hospitals was 5,835. Admissions during the year numbered 4,048 or a total of 9,883 patients received treatment during the year. 6,144 patients remained in both hospitals on 31st December 1951.

Accused Persons Suspected of Insanity :

195 accused persons were referred to the hospitals by the Procurer General for examination and report. The parquet asked for reports in respect of 58 other patients who were admitted to the hospitals in the ordinary way. This brings the total number of reports forwarded to the parquet to 253.

Physical Condition of Admissions :

The ratio in both hospitals was as follows :

	Abbassia	Khanka
	%	%
Fair	63.6	52.3
Poor	31.1	29.2
Very poor or moribund	5.3	18.5

Wassermann Tests :

3,782 blood specimens for Wassermann reaction and 33 specimens of cerebro-spinal fluid were sent to the Laboratories Department for examination and gave various results.

Deaths :

Deaths recorded during the year were 215 in Abbassia and 181 in Khanka or a death rate of 4.1% and 3.9% respectively of the patients treated in both hospitals.

Electric Shock and Cardiazol Treatments :

Treatment by both methods continued on a larger scale. Cases of schizophrenia, manic depressive, confusional psychosis and anxiety neurosis were treated giving results varying between recovery, marked or slight improvement and no improvement.

Accidents :

41 major and 2,806 minor accidents took place in both hospitals.

Artificial Feeding :

This was carried out 15,498 times in Abbassia hospital and 2,267 times in Khanka without accidents.

Physical Illness :

11,443 cases were treated locally from physical illness.

Births :

8 children were born in the female wards at Abbassia hospital.

Autopsies :

65 post-mortem examinations were done during the year.

Pharmacy :

42,740 prescriptions and 2,000 photos were prepared in the pharmacy of Abbassia hospital, and an almost equal number in Khanka.

X-Rays Department :

126 photos and 318 screenings were made in Abbassia hospital.

Central Medical Commission :

72 patients in Abbassia hospital and 30 in Khanka were reported upon to the central medical commission.

Board of Control :

3,970 reports on new patients and 1,855 on old patients were submitted to the Board of Control by the two hospitals regarding their admission, detention and discharge.

The Out-Patient Clinics :

The two out-patient clinics at the Malek and Boulaq general hospitals continue to carry out their useful functions. A total of 857 cases presented themselves during the year for examination. Of this number; 604 were mental cases some of which were accompanied by organic nervous diseases.

107 cases were psychoneurosis and 95 were ordinary medical cases.

The number of sittings of electric convulsion therapy totalled 871.

Social Service :

The social services section renders invaluable services to patients. Besides investigation in the social status of attendances at the out-patient clinics, the social workers are in charge of the clubs and library and look after the entertainment of inmates at Abbassia and Khanka hospitals. 18 meetings were held during the year for the entertainment of the patients.

Financial aid is extended to destitute patients and their families by the Social Insurance offices and benevolent societies scattered throughout the country.

Chapter XV—Health Education and Social Services

The state of public health throughout the country is such that great efforts are required to awaken the population's interest in matters of health. A comprehensive programme for health education has therefore been prepared utilising all modern means of publicity and improving new methods consistent with educational standards of the various categories of the population.

Activities of Health Propaganda Units :

The Ministry counted upon its twenty propaganda units for the dissemination of health education among the urban and rural population. These dealt with the local health problems of each particular area. Among these problems may be cited endemic and infectious diseases control, amelioration of public health and preservation of the health of the individual.

The following are details of the main activities of the units :

	Number
Day-time propaganda meetings	5,235
Evening propaganda meetings	4,187
Meetings held in public markets	976
„ „ „ schools	2,432
„ „ „ Army and Police Barracks	124
„ „ „ for workmen	172
„ „ „ in social institutions	264
„ „ „ cinemas	994
„ „ „ public thoroughfares and parks	438
„ „ „ during fairs and religious events	36

Health Education :

This covered all the diseases and health problems on which the population needed enlightenment, e.g. infectious diseases, endemic and venereal diseases, nutrition, child welfare.

Propaganda drives were organised in connection with seasonal infectious diseases as well as health weeks in connection with other problems.

Broadcasting :

A programme for the health education of the population was broadcast regularly during the year. This included 49 lectures and talks, 12 representations, 18 news bulletins and 130 questions answered.

Cooperation with other organizations :

In conjunction with the School Hygiene Department of the Ministry of Education, films were shown and lectures delivered in schools of all types.

The Ministry participated in the World Health Day by holding meetings demonstrating the value of cooperation in raising the standard of public health. These meetings were also broadcast.

Publications :

In addition to the ordinary publications, 8 coloured posters were published illustrating : Immunity — The workman — nutrition — narcotics — Phlegm — eyes — tuberculosis — insects. Fifty thousand copies of each poster were produced and distributed to public health inspectorates in the provinces, health propaganda units and other organizations, schools, etc.

Preaching :

In view of the influence of religion upon the population, arrangements were made with the Mosques Section of the Ministry of Wakfs and the Preaching Section of Azhar for sermons to be delivered in public congregations and in mosques touching on the more prevalent diseases.

The Cairo Museum of Hygiene :

Since this museum was taken over by the Ministry in 1950, every effort was made to render it a health education centre where the population can get information on all the health problems.

Entertainment of in-patients.

During the year under review, 36 meetings were held in the various hospitals for the entertainment of in-patients.

Activities of Assiut Social Health Services Office :

This office has undertaken valuable social health services, namely :

I.—Services rendered to patients and their families :

Examined the social condition of 231 patients referred to it by different authorities and gave the necessary aid, e.g.

- (a) Arranged for the employment of 4 ex-patients in suitable occupations.
- (b) Arranged for meals to be distributed to 15 families of patients who were found suffering from mal-nutrition.
- (c) Arranged for artificial limbs to be provided to 9 patients against the Hospital Day Fund.

Besides, 96 cases required specific treatments which the office facilitated in the various units.

112 pregnant women suffering from syphilis, malnutrition or frequent abortion were referred to the office by child welfare centres. The husbands of these cases were persuaded to undergo treatment, meanwhile financial aid and meals were provided.

Another 46 chest diseases patients forwarded by chest dispensaries received aid from the office.

The mental hospitals asked the office to follow up 3 mental cases discharged as cured

II.—Ante matrimonial Examination :

This office undertakes the medical examination of betrothed persons of both sexes to ensure their freedom from hereditary afflictions. Healthy persons are provided with certificates of eligibility. Others are persuaded to postpone their marriage and advised to undergo treatment.

During the year, 399 persons (218 males and 81 females) presented themselves for examination. 86 males and 12 females were found eligible. The rest were given the necessary advice.

III.—House visits :

The health visitors paid 450 house visits to instruct mothers in child care, house sanitation, care of the sick and methods of protection against infectious diseases.

IV.—Social and Health Research :

The office compiled data and undertook researches on diseases of malnutrition, chest diseases, ophthalmias, parasitic and infectious diseases with a view to submitting an appreciation of the state of health within the region to the higher authorities, suggesting the solution to the various problems and directing health propaganda accordingly.

V.—Cooperation with other government and private social organizations :

The office continued its cooperation with several government and private organizations with social activities.

VI.—Health Education :

The office pays special attention to health education of the various categories of the population in collaboration with other educational institutions.

PART III—MEDICAL TREATMENT

Chapter XVI—General Hospitals

Number of Hospitals :

There were 90 hospitals in operation at the end of the year 1951. Of these, 22 general hospitals were located in governorates and chief towns of provinces and 68 district hospitals in district and large towns.

Hospital Accommodation :

The total number of hospital beds at the end of this year was 8,611. This number includes 695 beds of ophthalmic branches and 661 beds for ancylostoma branches within these hospitals as well as 1,413 beds for medical personnel of these hospitals.

These are distributed as follows :—

1st. Class	2nd. Class	3rd. Class Paying	3rd. Class Grátis	TOTAL	Ophth. beds	Ancyl. beds	TOTAL	Total beds for Patients	Beds for Personnel	Total Bed
31	67	16	5,728	5,842	695	661	1,356	7,198	1,413	8,611

In-Patients :

A total of 117,610 in-patients were treated this year, exclusive of ophthalmic and ancylostoma in-patients. 4,515 deaths were recorded among the in-patients or a death-rate of 3.84%.

X-Ray Examination and Treatment :

The following table gives the number of patients examined and treated with X-Rays and electricity in general hospitals during the year :

X Ray Examination		X Ray Treatment		Treatment with light	Treatment with Electricity
Deep	Super-ficial	Deep	Super-ficial		
3,400	4,907	292	589	465	5,137

Out-Patients :

A total of 4,101,577 out-patients (2,634,792 new and 1,466,785 old) were treated this year exclusive of ophthalmic and ancylostoma out-patients.

Dental Clinics :

21 general hospitals and 21 district hospitals are now provided with dental clinics. These have treated 148,850 patients (115,348 new and 33,502 old).

Operations :

A total of 38,521 major operations — including abdominal and urinary system operations — were performed during the year. Of these operations, 32,622 recovered, 3,618 improved, 972 died and 1,309 were remaining at the end of the year. The death rate was 2.5%.

Abdominal and urinary system operations numbered 7,198. Of these, 6,057 recovered, 479 improved, 445 died and 217 were remaining at the end of the year. The death-rate was 6.18%.

The following table No. 101 gives details of the number of hospitals in operation and number of in and out-patients during the past five years.

TABLE No. 101.

Year	Gen. Hospitals	Dist. Hospitals	Out.pt. Clinics	Number of beds	In patients	Out-patients
1947... ..	28	56	4	6,879	62,699	1,952,519
1948... ..	28	56	5	7,171	69,092	2,165,107
1949... ..	29	56	5	6,878 ⁽³⁾	104,732	2,886,893
1950... ..	22	67	4	8,573 ⁽⁴⁾	114,430	2,556,715
1951... ..	22 ⁽¹⁾	68	⁽²⁾	8,611 ⁽⁴⁾	117,610	2,634,792

(¹) The reduction is attributed to the new application of the name. General hospitals now apply to those located in governorates and chief towns of Provinces. Before 1949, the name applied to hospitals located in certain large districts as well.

(²) These clinics have been annexed to the Rural Health Department.

(³) The reduction is the result of the requisition by the Ministry of War and Marine of Hilmiet Zeitoun hospital.

(⁴) This number includes beds of the ophthalmic and ancylostoma branches within these hospitals.

Chapter XVII—Ophthalmic Hospitals

New Units :

(a) Hospitals : Nil.

(b) Branches : Sinnouris. The Sinnouris hospital accommodated in tents was transferred to Tamia.

This brings the total number of units to 107, i.e.

95. Permanent (Buildings and Tents).

12 Travelling.

107 TOTAL

Clinical Work.

The following table No. 102 shows the clinical work done during 1951 compared with that done during 1950 :

TABLE No. 102

	1950	1951
New patients.	1,445,921	1,362,801
Out patients	5,698,972	4,696,634
Number of out-patient visits ...	7,208,525	6,112,565
Operations	210,773	183,114
Ophthalmias	313,064	325,320

Blindness :

The number of cases of blindness in one or both eyes, excluding cataract cases causing blindness, was 36,890 or 2.6% of the total patients examined at the ophthalmic hospitals. By adding the cataract cases causing blindness, this ratio becomes 2.7%.

Other Services :

1. Ophthalmologists pay regular visits to the following institutions and hospitals to examine and treat ophthalmic cases :

- Leprosy Hospital and colony at Sioufia and Abu-Zaabal.
- Mental Diseases Hospitals at Abbassia and Khanka.
- Fever Hospitals at Abbassia and Imbaba.
- Convalescents settlement at Marg.
- Children's preventoria at Giza and Marg.
- Mataria Dispensary.
- Chronic Diseases Hospital at Helwan.

2. The Ophthalmologists of the Ministry participate in the examination of motorcar drivers at traffic offices in Abbassia and the provinces. They are also members of the Central and Provincial medical commissions.

3. During pilgrimage, a medical mission including two ophthalmologists is sent to the Hedjaz for the examination and treatment of pilgrims at Mecca and Medina.

4. Ophthalmologists of other administrations are trained at ophthalmic hospitals in the performance of the different ophthalmic operations. Ophthalmic units of other ministries are also provided with surgeons who have been trained in ophthalmic hospitals.

5. Assistant midwives and health visitors of the rural health centres are also trained at the various ophthalmic hospitals in ophthalmic treatment technique so that they may be able to give aid to eye cases that attend the health centres and instruct the villagers in the care of the eye.

Post Graduate Course :

A post graduate course is provided in ophthalmic medicine and surgery at the Cairo University for fresh graduates who propose to join the ophthalmic Section.

Nursing Staff :

Male attendants in ophthalmic units are still being replaced by nurses as funds permit and until nursing in ophthalmic units is fully undertaken by female nurses.

Accommodation :

The number of beds in all ophthalmic units was 2445. Where space permits in in-patient sections, more beds are added.

Ophthalmic Library :

The circulating library continues to provide medical officers in ophthalmic units with old and new literature on ophthalmology.

Apparatus and Instruments :

The Ministry keeps ophthalmic units provided with modern instruments and appliances to enable them to keep pace with ophthalmic developments.

Chapter XVIII—Pharmacies

Private Pharmacies :

73 new private pharmacies were authorised by the Ministry during the year. Approval was given for the transfer of ownership of 20 pharmacies, some of which were owned by non qualified pharmacists.

Night Service Pharmacies :

The four night service pharmacies in Cairo and suburbs have dispensed 12,725 prescriptions during the year, exclusive of patented preparations which are dispensed without prescriptions.

Schedule V Drug Stores :

Five permits for trading in Schedule V substances (medicinal plants) were granted during the year : Two in Alexandria, two in Cairo and one in Giza.

Schedule XI Drug Stores — Simple Drug Stores :

13 permits for simple drug stores were granted this year : 5 in Gharbia, 2 in Sharkia and one in each of Abu Sueir, Menoufia, Beni Suef, Fouadia, Assiut and Giza.

Agents :

Five permits for agents with depots and one for an agent without a depot in Cairo ; 4 permits for agents with depots in Alexandria and one permit for an agent without a depot in Port Said were granted this year.

Shedule I and II Poisonous Drug Stores :

17 permits were granted this year : 8 in Cairo, two in Alexandria, 2 in Giza and one in each of Gharbia, Menoufia, Minia, Qena and Canal.

Shedule IV Drug Stores :

25 permits were granted : 18 in Cairo, 4 in Alexandria, and one in each of Kallubia, Giza and Canal.

Pharmaceutical Laboratories :

Two pharmaceutical laboratories were authorised during the year.

Registration of Egyptian Specialities :

98 Egyptian pharmaceutical specialities were registered and 16 refused registration during the year. The total number of registered local specialities is 1,844.

TABLE No. 103.— STUPEFACIENTS IMPORTED INTO EGYPT
AND EXPORTED THEREFROM DURING 1951

Drug	Quantity imported		Quantity exported	
	Kg.	Gr.	Kg.	Gr.
Opium and its preparations	33	180	—	—
Morphine and its salts	1	638	—	—
Cocaine and its salts	0	250	—	—

TABLE No. 104.—STUPEFACIENTS CONFISCATED FOR ILLIOT
IMPORT OR EXPORT.

Dr.	Kg.	Gr.
Opium	1,406	—
Cannabis Indica	13,509	—

TABLE No. 105.— STUPEFACIENTS CONSUMED
FOR MEDICAL PURPOSES.

Drug	Kg.	Gr.
Opium and its preparations }	34	790
Morphine and its salts	2	015
Cocaine and its salts	0	980

Chapter XIX—Universities Hospitals

Manial Hospital :

Only three beds were added this year to the accommodation of the hospital bringing the total accommodation to 1,452 beds. A new section for psychiatrics has been set up consisting of 6 beds (the 3 new beds and three beds detached from the casualty department which now consists of 40 beds as against 43 in 1950).

In-patients :

During the year, 20,568 in-patients were admitted to the various departments. This is 1,550 in-patients fewer than last year. Of this decrease, 1,056 patients affected the medical diseases departments. The remaining 494 were shared by the other departments : Casualty, Radiology, Chest and Tropical diseases.

Discharges as cured, improved or at their own request totalled 15,659 as against 16,733 in 1950. 3,625 in-patients were referred to the out-patients department for completion of treatment and 45 in-patients were forwarded to other hospitals.

Deaths totalled 846 or a death-rate of 4.1%. This is the same death-rate as last year.

Of 657 casualty cases admitted during the year, 547 recovered, 102 died and 8 were still under treatment at the end of the year. The casualty cases were involved in car accidents, tram, train, vehicles, motor cycles, bicycles, quarrels, stabs, falls, gun fire, explosions and scalds.

Diagnosis of Medical Diseases In-patients :

Diagnosis of medical diseases treated within the in-patient departments fall under ten headings, namely :

(1) Respiratory system diseases numbered 2,028 (1,537 males and 491 females). 135 deaths or 6.6% were recorded (112 males and 23 females).

(2) Digestive system diseases numbered 1,922 (1,266 males and 656 females). Deaths numbered 103 (72 males and 31 females) or 6%.

(3) Diseases of the cardio vascular system numbered 3,216 (2,080 males and 1,136 females). Deaths numbered 397 (263 males and 134 females) or 12.4%.

(4) Diseases of the uro-genital organs were 682 (543 males and 139 females). 67 deaths were recorded (48 males and 19 females) or 9.8%.

(5) Diseases of the central nervous system numbered 1,440 (1,015 males and 425 females). 88 deaths (60 males and 28 females) were recorded or 6.1%.

(6) Diseases of the blood, lymphatics and the spleen totalled 825 (659 males and 166 females). 53 deaths (43 males and 10 females) were recorded or 6.4%.

(7) Diseases of the metabolism and endocrine glands numbered 553 (357 males and 196 females). 19 deaths (16 males and 3 females) were recorded or 3.4%.

(8) Diseases of the joints and bones numbered 380 (208 males and 172 females). Two deaths were recorded, a male and a female.

(9) Infectious diseases and fevers numbered 149 (86 males and 63 females). Three deaths were recorded, 2 males and a female.

(10) The miscellaneous diseases numbered 223 (133 males and 90 females.) 22 deaths were recorded, 15 males and 7 females.

Out-Patients Department :

A total of 621,287 out-patients (274,130 new and 347,157 old) were dealt with this year as against 916,945 out-patients in the previous year or 295,658 patients less than last year. It is observed that the decrease is general in all departments and may be attributed to the establishment of various dispensaries and private clinics in the neighbourhood of patients' residence.

Dental out patients totalled 66,209, this year.

Kasr el Aini Hospital :

The number of beds remained the same as last year, namely, 1,250 beds.

In-Patient Departments :

The number of in-patients treated in the various departments was 20,508 (18,426 adults and 2,082 children), as against 21,572 (20,262 adults and 1,310 children) in the previous year.

13,473 in-patients were discharged as cured, improved or at their own request. 5,903 in-patients were referred to the out-patient department for completion of treatment and 35 in-patients were forwarded to other hospitals. Deaths totalled 780 or a death-rate of 3.1%. 468 of the deaths were casualty cases who died as a result of their injuries.

Casualty Cases :

These numbered 4,858 as against 4,045 in 1950 or 813 more cases than last year. Of this number, 468 died as against 376 in 1950.

According to the number of victims, motor vehicles come first having accounted for 784 casualties (612 adults and 172 children), then come falls on the floor with 685 casualties, falls from height with 504, falls downstairs with 440, quarrels with 403, tram with 292, (234 adults and 58 children) and then scalds with 178 casualties.

DEMERDASH AND CHILDREN HOSPITALS, ABBASSIA :

Demerdash Hospital :

In August 1928, the Council of Ministers agreed to a proposal made by Late Abdel Rehim Mustafa El Demerdash to contribute in the construction of a hospital at Abbassia. The construction of the ground and 1st floors and the out-patients department was completed and the hospital opened in 1931. New constructions were added from time to time and the hospital was equipped with most modern apparatus to meet future increase of patients.

This hospital was annexed in 1947 to the Universities Hospitals Department and now serves educational and treatment purposes for Abbassia Faculty of Medicine. The hospital started with 100 beds. During this year, the accommodation reached 456 beds, distributed on the various departments. 12,469 in-patients and 123,070 out-patients were dealt with during the year.

Abbassia Children Hospital :

This was opened in September 1950 with 113 beds increased to 128 beds in 1951. 4,938 in-patients and 81,403 out-patients were treated in the hospital during the year.

Alexandria Hospital :

Three new beds were added this year bringing the total number of beds to 820.

In-Patients :

22,366 in-patients were admitted during this year as against 20,993 in 1950. Of this number, 21,493 were discharged as cured, improved or at their own request ; deaths totalled 981 or a death-rate of 4.5% as against 19,974 discharges, and a death-rate of 4.6% in the previous year.

Diagnosis of in-patients showed that 615 patients suffered from respiratory system diseases, 387 from digestive system diseases, 991 from cardio-vascular system diseases, 98 from uro-genital system diseases, 410 from nervous system diseases, 171 from diseases of the blood, lymphatics and spleen, 165 from diseases of metabolism and endocrine glands, 112 from diseases of bones and joints, 26 from infectious diseases and fevers and 464 from miscellaneous diseases.

Diagnosis of surgical cases shows that there were 841 cases of pyogenic infections and infective wounds, 365 cases of burns and scalds, 676 cases of wounds, 1,461 cases of fractures, 520 cases of affections of the brain and meninges, 1,608 cases of affections of the intestines, 513 cases of affections of the rectum and anus and 715 cases of non-localised lesions of the urinary system.

Out-Patients :

These numbered 662,025 (238,337 new and 423,688 old) as against 742,542 (220,662 new and 521,880 old) in 1950.

188,502 out-patients were dealt with by the surgical department, 159,834 by the ophthalmic department and 134,530 by the medical diseases department.

There is also a tropical diseases service which dealt with 29,529 out-patients (18,721 new and 10,808 old).

Chapter XX—Bilharzia and Ancylostoma Treatment

Treatment Activities during the year 1951

TABLE NO. 106.—TREATMENT ACTIVITIES UNDERTAKEN BY THE UNITS OF THIS SECTION
DURING THE YEAR 1951, AS COMPARED WITH THOSE OF 1950

Details	Year	No. of new patients	Positive Bilharzia		Positive Ancylostoma		Positive Ascaris		No. of. Bilharzia injections given	No. of. Anthel- mintic doses given
			No.	Rate per Cent	No.	Rate per Cent	No.	Rate per Cent		
Treatment done at the Unit headquarters....	1951	1,113,288	583,020	52	143,135	13	399,127	36	4,363,905	459,358
	1950	1,133,567	585,821	51	162,338	14	401,366	35	4,306,583	456,592
Treatment of re- mote villages through branch units	1951	6,287	3,796	60	911	14	3,257	52	20,267	2,817
	1950	5,699	3,864	68	522	9	3,647	66	30,380	2,685
Treatment by Mobile Units.	1951	44,364	19,977	45	4,440	10	22,443	55	144,410	22,739
	1950	50,334	37,830	75	5,565	11	24,950	49.5	140,092	17,181
Treatment by cooperative cen- tres	1951	56,669	18,161	32	7,702	13	17,978	31	155,873	20,291
	1950	65,378	24,350	37	6,225	9.5	17,107	26	174,120	15,712
Treatment of school pupils.	1951	34,716	10,714	30	1,162	3	2,931	8	59,177	3,310
	1950	30,378	9,897	33	617	2	3,212	11	53,756	3,244
Treatment of Home Guard.	1951	3,796	2,097	55	953	26	1,136	30	20,448	1,861
	1950	9,410	2,525	51	1,307	27	1,498	31	26,887	2,423
Treatment of workmen ...	1951	4,030	1,304	32	160	4	824	20	7,767	856
	1950	22,498	8,511	33	2,509	11	7,810	35	64,993	9,375

Free meals issued to patients during treatment.

273,140 midday meals were served to anaemia and pellagra out-patients during treatment, as against 325,922 last year. The decrease in the number of patients receiving these meals was due to : (a) Abolition of these meals in ten units, not being needed ; and (b) suspension of the meal during winter months in all the units as a measure of economy.

Certificates of freedom from parasites.

178,933 certificates were issued to school pupils and workmen, as against 186,070, last year. In addition, a greater number of certificates was issued by the School Hygiene Department, Ministry of Education who is principally concerned.

In-patients.

Year	Treatment	Cured	Improved	Comments
1951	20,203	19,333	870	—
1950	21,265	20,312	953	—

NEW UNITS AND AREAS SERVED.

New Units :

(i) *Out-Patient Units.*

No new units were provided this year. The total number of out-patient units remained the same as last year, namely 101, comprising 7 stationary units, 44 travelling, 33 ancylostoma branches and 17 school dispensaries.

(ii) *In-patient units.*

Provision was made for a 20-bed in-patient department at the Ancylostoma Branch within Hehya District Hospital.

Provision was also made for a simplified eudemic diseases treatment branch within Kafr Saqr District Hospital, with a 20 bed in-patient department and an out-patient dispensary.

The Number of in-patient accommodation remained the same as last year i.e. 2,020 beds.

Transfer of units :

Hereunder is a statement of the units transferred during the year :

Unit	Transferred		Date	Comments
	From	To		
No. 5 Ancylostoma Dispensary	Kous	Shubra El-Kheima (Kaliubia)	July 16, 1951	Only O.P. Disp. staff transferred. For storage because of shortage of doctors.
No. 13 Mobile unit... ..	Kaliub	„ „ „	Aug. 2, 1951	
No. 15 „ „	Qaha	Toukh	Feb. 24, 1951	
No. 16 „ „	Kaliub	Cairo (Fom el Khalig)	Aug. 2, 1951	

IMPROVEMENT IN THE WORKING SYSTEM.

Extension of Unit Activities.

(i) Collective treatment of industrial workmen.

Following last year's collective treatment activities undertaken in villages and factories of Kaliub District, the units were urged to extend their treatment activities to the organized assemblies of people within their areas, namely :

TABLE No. 107.

	No. Examined	Positive			Bilharzia injections administered	No. of anthelmintic doses given
		Bilharzia	Ancylostoma	Ascaris		
Kom Ombo Inspection	834	377	80	4	3,435	94
National Oil Company at Zagazig	520	270	68	278	1,931	214
Workmen of Electrical power Stn., El Atf	96	26	—	—	—	—
Lavoudakis Factories at Alexandria	308	88	—	100	141	54
Snity Factory, Hadra	1,721	178	6	403	1,635	409
Sollum & Metaxas Factory at Mataria (Cairo Suburb) ...	551	165	6	39	625	85
TOTAL	4,030	1,104	160	824	7,767	856

(ii) Yearly examination and treatment of pupils of elementary and compulsory schools.

In view of the high incidence of bilharzia and other intestinal parasites among pupils of elementary and compulsory schools in villages, the Section arranged with the Ministry of Education for pupils of these schools to report to units in the vicinity for examination and treatment following their admission. Certificates of freedom from parasites should be kept in their files.

(iii) Cooperation with charitable institutions, factories, companies and other organizations.

Cooperation was maintained with private medical services which were provided with centres for the examination and treatment of endemic diseases.

THE FOLLOWING.—TABLE NO. 108 GIVES DETAILS OF THE MEDICAL SERVICES AND THEIR ACTIVITIES.

Medical Unit	Organization to which it belongs	No. examined	Positive for			Bilharzia injections given	No. of Anthelmintic doses given
			Bilharzia	Ancylostoma	Ascaris		
Red Crescent Dispensary, Armant	Red Crescent ...	9,573	1,577	777	129	14,543	921
Cairo University	Univ. Med. Sect	5,524	355	—	—	1,946	—
Gabbari Dispensary	Al Moassat Sect.	3,755	394	53	1,280	2,287	644
Samanoud Hospital	Gen. Hosp. Sect.	5,563	3,573	719	2,593	18,586	1,663
Dessouk Hospital	" "	7,772	2,318	562	734	15,922	1,093
Mersa Matrouh Hospital	Frontier Districts Med. Section	994	136	32	236	669	247
Zifta Hospital	Gen. Hosp. Sect.	4,671	2,559	1,551	3,272	20,249	3,464
Idfina Hospital	" "	2,931	2,119	607	2,599	12,588	1,241
Behout Hospital	" "	3,356	1,677	504	538	7,679	576
Arish Hospital	Front. District Med. Section	6,195	60	194	4,969	551	4,840
Eneiba Hospital	Gen. Hospitals Section	1,288	355	—	3	2,197	3
Shoubra Kheima Hospital	" "	3,323	1,353	370	415	7,821	749
Fayed Malaria Station ...	Research Inst.	1,724	1,092	333	190	7,855	306

COOPERATION WITH THE CENTRAL MEDICAL COMMISSION AND THE MEDICAL COMMISSIONS IN PROVINCES AND GOVERNORATES.

It was proposed that candidates for government service should be examined for bilharzia by medical commissions; a bilharzia infection being considered as a cause for rejection. Two laboratory assistants have been appointed to the Central Medical Commission for the purpose and public health inspectorates in the provinces were requested to delegate one of the laboratory assistants in the bilharzia treatment units to attend meetings of the provincial medical commissions.

EXPEREMENTS :

(i) *Bilharzia mass examination in the Siouf Area, Behera Province.*

The Ministry participated in the experiments conducted in Siouf area, Behera Province, for snail eradication around villages. It was decided to carry out a complete examination for urinary and intestinal schistosomiasis of the whole population of certain villages twice : once before treatment of snail infested water courses and a second time after the lapse of one year.

Work was started on 7/11/1951 and was still in progress at the end of the year.

(ii) *Drug Tests :*

Experiments for abridging bilharzia treatment, by means of intravenous and intramuscular drugs were continued, namely :

- Daily administration of tartar emetic injections to out patients for ten-days.
- Two day treatment with Repodral for in-patients.
- Four day treatment with Repodral for out-patients.
- Two day treatment with tartar emetic for out-patients.

The preliminary results were not encouraging, since such treatments required care and caution. It was decided to continue investigations.

Chapter XXI—Malaria

1.—All malaria units, the Cairo Anti-mosquito service, the Fayoum Campaign, the Sanitary Air-Squadron and the Sanitary Engineering Service have cooperated this year in the general control work. Malaria units in operation numbered 25 main and 50 branch stations in Lower Egypt and 14 main and 24 branch stations in Upper Egypt. Each of these units conducted a general microscopical survey of the inhabitants of its area on the same lines as last year.

These units observe the application of the malaria law No. 1 of 1926 modified by law No. 78 of 1946. Clay balls soaked in malariol and 5% D.D.T. were used in the control of rice cultivations lying within a kilometre from the villages in the area served. Ministerial arrêtés forbidding aquatic cultivations around large towns were applied. Public Health units were spray painted with 5% D.D.T. in kerosene for the control of mosquitoes and flies.

General control measures thus covered an area of 954,175 feddans (acres), including Cairo City and suburbs and Fayoum Province, with a population of 5,488,736 inhabitants.

2.—*Blood Films and Results :*

(a) *Patients attending Malaria units :*

Of a total of 48,607 blood films microscopically examined by malaria units and malaria laboratory assistants in ancylostoma units during the year, 6,389 or 13.1% were returned positive. Of these, 1,085 were new infections and 5,304 relapses, as compared with 9,084 films and 1,231 positive cases in the previous year.

(b) *General Survey :*

Of a total of 238,673 blood films taken for general survey, 2,174 or 0.9% were returned positive. Of these, 870 were new infections and 1,304 relapses as compared with 126,316 blood films and 2,649 positive cases in the previous year.

3.—*Malaria Incidence among Infants attending Malaria units :*

The incidence of malaria among infants under one year of age is considered a new infection. Only 565 blood films from infants were collected in Lower Egypt. Of these, 16 or 2.8% were returned positive. Of 25 films collected from Fayoum Province, 2 or 8% were positive.

4.—*Types of Malaria :*

Tables Nos. 115–117 give the incidence of all types of malaria in governorates and provinces provided with malaria units and ratios of each type to total positive cases.

5.—*Monthly Distribution of Malaria :*

Tables Nos. 118–121 give the monthly distribution of the various types of malaria.

6.—*Malaria Cases and Deaths reported in governorates and Provinces during 1950 and 1951.*

Table No. 122 gives the number of malaria cases and deaths reported to the Statistical Department from the governorates and provinces during 1950 and 1951.

7.—*Survey of Mosquito Breeding Places :*

Tables Nos. 123 and 123-a give the distribution of breeding places according to Darakat (zones) and tables Nos. 124 and 124-a give this distribution according to birkas and marshes in Lower and Upper Egypt. These show that the predominant species of mosquito malaria carrier was the *A. pharoensis*, followed by *A. sergenti*.

Adequate control measures have been taken until these breeding places were finally disposed of by the competent ministries and departments.

8.—*Malaria Control Activities :*

Tables Nos. 125 and 125-a give details of kinds and quantities of insecticides consumed during the year and the surface of the areas controlled.

9.—*Warnings and Contraventions :*

Table No. 126 gives details of warnings and contraventions served under the Malaria law.

10.—*Treatment and Drugs :*

The same treatment technique was adopted this year as last year. Drugs were administered according to results of microscopic or clinical examination. Tables Nos. 127 and 127-a give the quantities of the various drugs distributed by the units.

II.—*Application of Malaria Law :*

No arrêtés forbidding the cultivation of aquatic plants were issued this year. Restrictions were enforced in localities covered by previous arrêtés.

Herebelow is a statment of the activities of the principal laboratory, the Cairo Anti-Mosquito Service, the Fayoum Campaign, the Sanitary Air-Squadron, and the Sanitary Engineering Service together with expenditures of the Central Administration, branches and units :

(a) *Principal Malaria Laboratory :*

During the year, this laboratory examined 28,087 blood films of which 678 were returned positive for malaria. The laboratory was manned by three laboratory assistants or a laboratory assistant more than last year. Besides, 1,245 samples of larvae and 1,304 samples of adult mosquitoes were examined.

(b) *Cairo Anti-Mosquito Service :*

The activities of this service comprised :

- (1) Systematic control of adult mosquitoes in habitations.
- (2) Systematic control of agricultural land and about a hundred feddans of surface area of seepage water.
- (3) The sanitation of water systems of habitations particularly those habitations which drain in cesspits numbering 87,779.

This service is manned by a total of 523 supervisors, surveyors, overseers and labourers.

Expenditures during the year amounted to L.E. 31,036.009 Mills of which L.E. 30,856.521 Mills. were for salaries and allowances and L.E. 181.388 Mills. for rents. Costs of insecticides were debited to Item 10 Supplies.

(c) *Fayoum Campaign :*

Organization and Expenditures :

Work was started early this year following the termination of the Gambia campaign at Aswan. Mosquito control was preliminarily started in the villages surrounding Fayoum Bandar.

It was organised on the principle of dividing the whole area into permanent units and sectors. Fayoum Province was thus divided into four districts, each under a supervisor. The districts were divided into sectors, each under a controller. The sectors were in turn, divided into units, each manned by 3-5 labourers under an overseer. This organization which was adopted to overcome transport and supplies difficulties was applied to Fayoum and Sennouris Districts which comprised a total of 93 Darakat (zones). There was besides a general team for spray painting distant habitations which cannot be reached by foot, with its headquarters at Fayoum Bandar. The units commenced work on 7/4/1951 in Fayoum District and on 8/5/1951 in Sennouris District. The rate of houses spray-painted continued to rise until a maximum of 9,492 houses consisting of 55,153 rooms were spray-painted during the month of May. Meanwhile larvae were systematically surveyed and controlled in Fayoum, Sennouris and Abshaway districts.

The strength of the campaign was 260 overseers and labourers under an engineer. They had at their disposal 4 vehicles, 4 mechanics for maintenance of vehicles and sprayers, 5 motor drivers and 3 motorcycles.

2.—Results :

(a) *Adult mosquito survey :*

The ratio of infestation after painting decreased from 1.2% in 1950 to 0.45% in 1951

(b) Malaria cases and deaths from 1946–1951 :

Year		New cases	Relapses	Deaths
1946	... ..	1,622	1,781	3
1947	... ..	361	2,708	2
1948	... ..	120	1,398	1
1949	... ..	82	611	—
1950	... ..	60	154	—
1951	... ..	89	38	—

3.—Difficulties Encountered :

Shortage of insecticides and D.D.T. mixing equipment, damage of most sprayers and their old models, worn out means of transport and lack of spare parts represent these difficulties. The Malaria Section is endeavouring to overcome these difficulties with a view to accomplishing best results throughout the province by having all habitations spray-painted once a year.

4.—Expenditures :

These totalled L.E. 27,943.800 Mills. as detailed in Table No. 128, exclusive of cost of insecticides amounting to L.E. 38,518.996 Mills. which are debited to Item 10, Supplies.

(d) *Sanitary Air-Squadron :*

Details of activities of this Squadron are given in tables Nos. 109–112.

(e) *Sanitary Engineering Service :*

This Section is concerned with the laying down and execution of orders for the sanitation of houses in Cairo City. It was manned by two engineers. The sanitation of 16 houses was completed during the period from 1st March until June and 28 houses from July until the end of the year. Total costs were L.E. 287.581 Mills. for the former and L.E. 965.876 Mills for the latter. L.E. 5,000 had originally been allocated for the purpose but were not expended owing to some difficulties.

(f) *Expenditures :*

The following is a statement of expenditures of the Malaria Section and its units distributed according to items of Budget :

General Budget :

1.—Title I :			TOTAL	
	L.E.	Mills.	L.E.	Mills.
(Salaries-permanent staff)	20,160	109		
(Salaries-Temporary staff)	1,030	933		
(Salaries-Hors Cadre staff)... ..	6,360	141		
Infection-and Social Allowances ...	4,826	729		
			32,377	912

		TOTAL	
		L.E.	Mills.
2.—Title II:	Transport and Travelling allowance	2,082	207
	Rents, water, light.	3,213	878
	Telegrams	43	330
	Sundry	20	100
	Maintenance	18	125
	Porterage	38	104
		5,415	644

3.—Title III (New Works)

	L.E.	Mills.
General control measures	81,086	000
Fayoum Campaign	16,448	313
Sanitary Air-Squadron	5,326	000
Sanitary Engineering from	965	000
(from 1/7/1951-30/6/1952)		
		103,825 313
GRAND TOTAL		141,618 872

P.S.—Expenditures by Sanitary Engineering Service from March until end of June, 1951. amounted to L.E. 287.581 Mills.

TABLE No. 109.—THE SANTARY AIR SQUADRON CONTINUED ITS CONTROL WORK DURING 1951 AS INDICATED BELOW :

Date		District	No. of Sprayings	Total Flying Time		Total Spraying Time		Benzine in Gallons	Oil in Gallons	D. D. T. in Velsicol 20% in Gallons	Area in acres	Total expenses	Average cost of spraying the acre once
Beginning Work	Termina- ting Work			Hours	Min.	Hours	Min.					L.E. Mills	Mills.
7/1	22/4	Fayoum Auberg	11	15	14	3	3	444	6.5	354	5,232	206.306	39.4
11/1	8/2	Flying Training College, Belbeis	8	40	8	13	1	194	3.5	165	2,364	93.695	39.6
17/1	3/12	Qubba Palace area	69	55	35	18	18	1,353	24.5	2,182	29,272	983.488	33.59
25/2	10/9	Montazah Palace	10	10	26	57	3	658	9.	361	5,936	253.145	42.6
3/3	3/3	Gezira Sporting Club, Cairo	1	20	—	9	—	18	—	18	252	9.432	37.4
15/7	23/7	Edfina and Motobus area	15	20	24	38	6	563	8.	784	11,154	368.748	33.06
6/8	30/9	Dessouk	23	30	32	21	10	945	11.5	1,219	17,383	587.195	33.77
6/8	4/10	Idkou	18	55	21	37	7	579	9.5	902	12,880	410.337	31.8
TOTAL			...	5	164	16	51	4,754	72.5	5,985	84,478	2,912.346	34.47

TABLE NO. 110.—RESULTS OF LARVAE SURVEY AT IDKOU AREA

Date	Survey	Units Examined	Positive	Rate %	Pos. An.	Rate %	Pos. Culex.	Rate %
28-7 — 5- 8 ...	Pre - Spraying	849	388	64	269	32	155	18
6-8 — 19- 9 ...	Post 1st „	1,485	283	19	275	11	198	13·3
20-8 — 4- 9 ...	Post 2nd „	2,190	515	23	317	14	243	11
5-9 — 25- 9 ...	„ 3rd „	1,650	211	12·5	203	12	157	9
26-9 — 6-10 ...	„ 4th „	680	93	13	46	6·5	57	8·3

TABLE NO. 110a.—RESULTS OF ADULT MOSQUITO SURVEY AT IDKOU AREA

Date	Survey	No. of Houses Examined	Positive	Rate %	Pos. An.	Rate %	Pos. Culex	Rate %
29- 7 — 1- 8 ...	Pre-Spraying...	189	120	63·5	120	63·5	113	60·
1-10 — 8-10 ...	Post „ ...	170	118	69·4	59	34·7	58	34·1

TABLE NO. 111.—SURVEY WORK : RESULTS OF AIRCRAFT SPRAYING EDFINA AND MOTOBUS AREA : FROM 12-7 TO 18-7-1951)

Village	Survey	No. of units	Positive An.	Rate %	Positive An.	Rate %	Positive culex	Rate %
Mehallet el Amir	Pre-Survey ...	177	86	48·6	67	37·9	19	10·7
	Post Survey ...	523	159	30·4	89	17	70	13·4
Motobus	Pre-Survey ...	177	102	57·6	83	46·8	21	11·8
	Post-Survey ...	802	213	26·5	96	11·9	117	14·5

TABLE NO. 112.—RESULTS OF LARVAE SURVEY IN DESOUK LOCALITY (FROM 5-8 TO 10-10-1951)

Area	Survey	Rice cultivations		Canals in Rice cult		Other canals		Infiltration waters		Wells and sakias		Other Places		TOTAL		%
		Unit Exam.	Positive	Units Examined	Positive	Units Examined	Positive	Units Examined	Positive	Units Examined	Positive	Units Examined	Positive	Units Examined	Positive	
A. Sec. 1,2,3	Pre-Spraying	282	48	291	47	363	71	68	13	101	5	269	51	1337	245	18,3
	Post „	2496	430	1936	325	3021	491	533	116	899	66	2058	346	10950	1766	16,1
B. Sec. 4,5,6,7	Pre „	474	137	270	71	465	87	69	20	46	8	175	81	1599	554	22,1
	Post „	3943	818	1659	409	4735	782	599	184	338	56	1412	232	12809	2481	1936
C.S. 8, 9, 10	Pre „	187	75	75	21	75	9	20	3	15	—	65	16	437	128	2929
	Post „	1722	708	774	239	1017	273	145	47	196	—	902	303	4770	1210	33,7

TABLE NO. 113.—DISTRIBUTION OF BLOOD SPECIMENS FROM PATIENTS ATTENDING MALARIA UNITS AND THEIR BRANCHES AND ANCYLCOSTOMA HOSPITALS

Locality	No. of Specimens	Positive		Total	Rate %	Remarks
		New	Relapses			
Lower Egypt	38,526	1,011	4,813	5,824	15·1	
Upper Egypt	10,081	74	491	565	5·6	
TOTAL	48,607	1,085	5,304	6,389	13·1	

TABLE 113a.—DISTRIBUTION OF BLOOD SPECIMENS FOR GENERAL SURVEY, TAKEN BY MALARIA UNITS AND THEIR BRACHES, AND ANCYLOSTOMA HOSPITALS

Locality	No. of Specimens	Positive		Total	Rate %	Remarks
		New	Relapses			
Lower Egypt	147,184	777	1,039	1,816	1·2	Including 42 new Quartan malaria
Upper Egypt	91,439	93	265	358	0·39	
TOTAL	238,623	870	1,304	2,174	—	

**TABLE No. 114.—DISTRIBUTION OF MALARIA CASES ACCORDING TO TYPES
IN LOWER EGYPT AND CANAL GOVERNORATE DURING 1951.**

Province or Governorate	Total of Specim- ens	Total of Posit. Cases	Rate per cent	Benign Tertian			Malignant Tertian			Total of positive	
				No.	New	Relapse	No.	New	Relapse	New	Relapse
Canal	229	72	31·4	72	65	7	—	—	—	65	7
Suez... ..	1,229	4	0·32	4	3	1	—	—	—	3	1
Western Desert ...	750	87	11·6	44	20	24	43	15	28	35	52
Behera	4,060	560	13·7	513	68	445	47	13	34	81	476
Fouadia	7,348	1,797	24·4	1,574	20	1,554	223	—	223	20	1,777
Gharbia	2,153	172	7·9	161	46	115	11	2	9	48	124
Dakahlia... ..	7,794	685	8·7	677	496	181	8	5	3	501	184
Sharkia	6,207	1,316	21·2	1,207	242	965	109	7	102	249	1,067
Menoufia... ..	2,618	53	2·02	53	—	53	—	—	—	—	53
Kaliubia	6,138	1,078	17·5	837	6	831	241	3	238	9	1,069
TOTAL	38,526	5,824	15·1	5,142	966	4,176	682	45	637	1,011	4,813

**TABLE No. 115.—DISTRIBUTION OF MALARIA CASES ACCORDING TO TYPES IN UPPER EGYPT
AND THE SOUTHERN DESERT GOVERNORATE DURING THE YEAR 1951.**

Province or Governorate	Total of Specim- ens	Total of Posit. Cases	Rate per cent	Benign Tertian			Malignant Tertian			Total of positive	
				No.	New	Relapse	No.	New	Relapse	New	Relapse
Giza	1,065	316	29·6	296	8	288	20	1	19	9	307
Fayoum	3,324	104	3·1	83	18	65	21	2	19	20	84
Beni Suef	1,055	23	2·1	21	18	3	2	1	1	19	4
Minia	383	37	9·6	35	14	21	2	1	1	15	22
Assiut	567	16	2·8	16	6	10	—	—	—	6	10
Southern Desert ...	1,802	24	1·3	24	3	21	—	—	—	3	21
Gerga	1,229	5	0·4	5	—	5	—	—	—	—	5
Qena	656	40	6·1	40	2	38	—	—	—	2	38
Aswan	—	—	—	—	—	—	—	—	—	—	—
TOTAL	10,081	565	5·6	520	69	451	45	5	40	74	491

TABLE NO. 116.—MALARIA CASES OF ALL TYPES IN LOWER EGYPT AND CANAL
AND THEIR RATIO IN THE GENERAL SURVEY

Province or Governorate	Total of specimens	Total of positive cases	Rate %	Benign Tertian			Malignant Tertian			Total positive cases	
				No.	New	Relap.	No.	New	Relap.	New	Relap.
Canal	5,592	90	1.6	90	90	—	—	—	—	90	—
Suez	5,482	2	0.03	2	—	2	—	—	—	—	2
Western Desert:	8,284	372	4.4	40	12	28	197	157	40	311	68
Behera... ..	17,668	128	0.71	74	33	41	48	6	48	39	89
Fouadia	19,590	87	0.44	87	3	84	—	—	—	3	84
Gharbia	18,308	113	0.61	100	45	55	3	3	—	48	65
Dakahlia	22,215	311	1.3	302	101	201	9	—	9	101	210
Sharkia	25,534	410	1.2	382	163	219	28	1	27	164	246
Menoufia	11,460	217	1.8	217	1	216	—	—	—	1	216
Kaliubia	13,051	790	6.005	27	9	18	52	11	41	20	59
TOTAL	147,184	1,809	1.22	1,321	457	864	353	178	175	777	1,039

N.B.—The above Total includes 142 new quartan malaria.

TABLE NO. 117.—MALARIA CASES OF ALL TYPES IN UPPER EGYPT
AND THEIR RATIO IN THE GENERAL SURVEY

Province or Governorate	Total of specimens	Total of positive cases	Rate %	Benign Tertian			Malignant Tertian			Total positive	
				No.	New	Relap.	No.	New	Relap.	New	Relap.
Giza	9,738	27	0.27	18	1	17	9	2	7	3	24
Favoum	16,699	70	0.41	64	24	40	6	6	—	30	40
Beni Suef	7,728	43	0.55	34	—	—	9	4	5	36	5
Minia	7,872	42	0.53	33	13	20	9	2	7	15	27
Assiut	5,765	9	0.15	9	1	8	—	—	—	1	8
Southern Desert Gov.	6,263	39	0.62	39	6	33	—	—	—	6	33
Gerga	5,127	—	—	—	—	—	—	—	—	—	—
Qena	28,219	128	0.45	126	—	126	2	—	2	—	128
Aswan	4,028	—	—	—	—	—	—	—	—	—	—
TOTAL	91,439	358	0.39	323	79	244	35	14	21	93	265

**TABLE No. 118.— MONTHLY DISTRIBUTION OF MALARIA CASES ACCORDING TO TYPES
IN LOWER EGYPT AND CANAL AND SUEZ GOVERNORATES DURING 1951**

Month	Total of Speci- mens	Total Positive	Rate %	Benign Tertain				Malignant Tertain			
				No.	New	Relap.	Rate %	No.	New	Relap.	Rate %
January	3,154	211	6·6	134	25	109	63·5	77	4	73	36·5
February	2,515	233	9·2	161	40	121	69·1	72	—	72	30·9
March	3,273	373	11·3	324	61	263	86·9	49	—	49	13·1
April	3,910	606	15·5	570	114	456	94·1	36	3	33	5·9
May	3,562	691	19·4	683	130	553	98·8	8	—	8	1·2
June	1,398	366	26·1	344	15	329	93·9	22	—	22	6·1
July... ..	4,578	803	17·5	756	138	618	94·1	47	—	47	5·9
August	4,843	926	19·1	838	197	641	90·4	88	2	86	9·6
September	3,731	628	16·8	551	106	445	87·7	77	4	73	12·3
October	3,183	636	19·9	500	101	399	78·6	136	22	114	21·4
November	2,544	242	9·5	190	25	165	78·5	52	8	44	21·5
December	1,835	109	5·9	91	14	77	83·4	18	2	16	16·6
TOTAL	38,526	5,824	15·1	5,142	966	4,176	13·34	682	45	637	1·77

**TABLE No. 119.— MONTHLY DISTRIBUTION OF MALARIA CASES ACCORDING
TO TYPE IN UPPER EGYPT AND THE SOUTHERN DESERT GOVERNORATE DURING 1951**

Month	Total of Speci- mens	Total Positive	Rate Per cent	Benign Tertain				Malignant Tertian			
				No.	New	Relap.	Rate %	No.	New	Relap.	Rate %
January	568	18	3·16	16	6	10	2·86	2	2	—	0·35
February... ..	674	13	2·28	13	6	7	2·28	—	—	—	—
March	978	25	2·55	23	5	18	23·5	2	1	1	2·04
April	956	33	3·45	32	12	20	33·3	1	—	1	0·1
May	1,052	31	2	31	—	31	2·0	—	—	—	—
June	488	52	10·6	51	4	47	10·5	1	—	1	0·2
July	1,161	94	8·09	94	4	90	8·09	—	—	—	—
August	848	112	13·2	106	10	96	11·3	6	—	6	0·7
September	900	63	0·7	57	10	47	63·3	6	—	6	0·66
October	998	72	7·2	57	9	48	0·66	15	1	14	1·5
November	769	36	5·7	26	3	23	2·6	10	1	9	1·3
December	689	16	2·03	14	—	14	20·3	2	—	2	0·3
TOTAL	10,081	565	5·6	520	69	451	5·1	45	5	40	4·1

TABLE No. 120.—MONTHLY DISTRIBUTION OF MALARIA CASES (GENERAL SURVEY) IN LOWER EGYPT DURING 1951

Month	Total of specimens	Total of positive cases	%	Benign Tertian				Malignant Tertian				Quartan			
				No.	New	Relap.	Rate per cent	No.	New	Relap.	Rate per cent	No.	New	Relap.	Rate per cent
January ...	11,516	86	0·7	62	27	35	0·5	24	9	15	0·1	—	—	—	—
February ...	11,951	113	0·9	101	79	22	0·1	12	1	11	0·1	—	—	—	—
March ...	13,813	225	1·6	115	35	80	0·8	76	71	5	0·5	34	34	—	0·2
April ...	11,727	215	1·8	162	29	133	1·3	55	26	9	0·4	18	18	—	0·1
May ...	15,438	227	1·4	201	31	170	1·3	12	6	6	0·07	14	14	—	0·08
June ...	12,179	87	0·7	86	29	57	0·7	1	1	—	0·008	—	—	—	—
July ...	11,733	94	0·8	93	23	70	0·7	1	—	1	0·008	—	—	—	—
August ...	11,447	171	1·4	134	69	65	1·1	14	14	—	0·14	23	23	—	0·2
September ...	12,497	138	1·1	109	48	61	0·9	23	6	17	0·1	6	6	—	0·04
October ...	12,145	207	1·7	124	38	86	1·02	76	11	65	0·6	7	7	—	0·05
November ...	11,744	145	1·2	83	36	47	0·7	40	20	20	0·3	22	22	—	0·1
December ...	10,994	108	0·9	51	13	38	0·4	39	13	0,3	1·3	18	18	—	0·1
TOTAL ...	147,184	1,816	1·2	1,321	457	864	0·8	353	178	175	0·09	142	142	—	0·2

TABLE No. 121.—MONTHLY DISTRIBUTION OF MALARIA CASES (GENERAL SURVEY),
IN UPPER EGYPT DURING 1951

Month	Total of specimens	Total of positive cases	—	Benign Tertian				Malignant Tertian			
				No.	New	Relap	Rate per cent	No.	New	Relap	Rate per cent
January	7,575	49	0·64	39	14	25	0·51	10	5	5	0·13
February	7,346	28	0·38	29	4	22	0·35	2	2	—	0·033
March	7,909	38	0·48	35	3	32	0·45	3	1	2	0·03
April	6,802	25	0·35	21	5	16	0·30	4	—	4	0·06
May	7,182	18	0·25	16	3	13	0·225	2	—	2	0·025
June	7,212	24	0·332	22	6	16	0·305	2	—	2	0·027
July	5,695	9	0·158	7	3	4	0·113	2	1	1	0·035
August	8,077	21	0·25	19	8	11	0·23	2	2	—	0·02
September	6,860	60	0·86	59	3	56	0·85	1	—	1	0·01
October	9,071	32	0·35	31	7	24	0·34	1	—	1	0·01
November	8,243	17	0·2	14	3	11	0·16	3	1	2	0·03
December	9,467	37	0·38	34	20	14	0·35	3	2	1	0·03
TOTAL	91,439	358	0·39	323	79	244	0·35	35	14	21	0·03

TABLE No. 122.—NUMBER OF MALARIA CASES AND DEATHS NOTIFIED
DURING 1950 AND 1951

Province or Governorate	New Malaria Cases				Difference		Relapsed Malaria Cases				
	1950		1951				1950		1951		
	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	
Cairo	509	4	341	3	—168	— 1	8	—	6	—	
Alexandria	91	1	116	—	+ 25	— 1	—	—	—	—	
Ismalia {	City... ..	—	—	8	—	+ 8	—	—	—	—	
	Suburbs ...	—	—	7	—	+ 7	—	—	—	—	
Port Said {	City	—	—	32	—	+ 32	—	—	—	—	
	Suburbs ...	—	—	—	—	—	—	—	—	—	
Damietta	—	—	2	—	+ 2	—	—	—	—	—	
Suez ... {	City	—	—	7	16	+ 76	+ 16	—	—	4	—
	Suburbs ...	307	—	376	—	—	—	6	—	37	—
Southern Desert	—	—	2	—	+ 2	—	—	—	—	—	
Western Desert Gover- norate	—	—	315	—	+315	—	—	—	33	—	
Sinai and Red Sea ...	—	—	3	—	+ 3	—	—	—	—	—	
Behera	188	3	324	—	+136	— 3	7	—	40	—	
Dakahlia	271	1	95	—	—176	— 1	7	—	19	—	
Faadia... ..	182	1	37	—	—145	— 1	1,291	—	478	—	
Gharbia... ..	129	1	116	—	— 13	— 1	—	—	—	—	
Menoufia	26	3	21	1	— 5	— 2	84	—	69	—	
Kaliubia	418	—	105	—	—313	—	33	—	38	—	
Sharkia... ..	935	—	598	2	—337	+ 2	31	—	127	—	
Aswan	—	—	—	—	—	—	—	—	1	—	
Assiut	71	—	12	—	— 59	—	1	—	—	—	
Beni Suef	239	—	71	—	—168	—	1	—	5	—	
Fayoum	60	—	88	2	+ 28	+ 2	154	—	38	—	
Gerga	12	—	2	—	— 10	—	—	—	2	—	
Giza	254	1	53	—	—201	— 1	1	—	—	—	
Minia	515	—	232	1	—283	+ 1	5	—	1	—	
Qena	48	—	11	—	— 37	—	16	—	43	—	
TOTAL	4,255	15	2,598	25	—1,657	+ 10	1,645	—	904	—	

TABLE No. 123.—DISTRIBUTION OF ANOPHELES LARVAE IN LOWER EGYPT DURING 1951

Province or Governorate	Station	No. of Larvae	Anopheles Species				Other species	Remarks
			Phar.	Mult.	Sergen.	Mouri.		
Canal	Ismailia	168	119	7	—	42	—	
Suez... ..	Suez... ..	10	10	—	—	—	—	
Western Desert ...	Baharia ...	13	—	4	9	—	—	
	Siwa	—	—	—	—	—	—	
	Wadi el Natroun	388	43	155	—	—	—	190 unknown species
Behera ...	Idkou	4,263	4,132	—	—	131	—	
	Kafr el Dawar.	4	4	—	—	—	—	
	Damanhour ...	48	25	—	—	—	23	
Fouadia ...	Fowa	193	104	—	—	—	—	89 culex
	Dessouk	26	26	—	—	—	—	
	Kafr el Sheikh.	132	40	—	—	—	—	756 & 170 pip
	Biala	36	12	1	—	—	—	23 c.
Gharbia ...	Tanta	167	167	—	—	—	—	
	Mehalla Kobra	36	33	—	—	3	—	
	Belcas	31	21	10	—	—	—	
Dakahlia ...	Mansoura ...	41	39	—	—	2	—	
	Fareskour ...	52	43	—	1	8	—	
	Dekernis ...	31	31	—	—	—	—	
	Mit Ghamr ...	15	14	2	—	—	—	
Sharkia ...	Zagazig	112	110	—	—	2	—	
	Belbeis	142	71	—	—	6	65	
	Inshas	—	—	—	—	—	—	
	Abu Kebir ...	157	68	3	—	—	—	86. C.
Menoufia ...	Shebin el Kom.	24	24	—	—	—	—	
	Ashmoun ...	22	22	—	—	—	—	
Kaliubia ...	Toukh	70	65	4	—	1	—	
	Kaliub	282	282	—	—	—	—	
TOTAL ...		6,463	6,203	186	10	64	305	

TABLE NO. 123a.—DISTRIBUTION OF ANOPHELES LARVAE.
IN UPPER EGYPT DURING 1951

Province or Governorate	Station	No. of Larvae	Anopheles Species			Other species	Remarks
			Pharo.	Mult.	Sargen.		
Gîza	Gîza	11	11	—	—	—	
Fayoum	Fayoum	11	7	1	—	—	4 Culex
Abshaway	Abshaway	5	1	—	—	—	4 „
Beni Suef	Beni Suef	14	13	1	—	—	
Minia	Minia	444	359	11	—	74	
Assiut	Assiut	35	14	1	—	—	20 Culex
Frontier Gov. ... Southern Desert	Dakhla Oasis ...	211	53	129	29	—	
	Kharga Oasis ...	286	197	89	—	—	
Gerga	Souhag	81	81	—	—	—	
Qena	Nag Hammadi ...	115	114	1	—	—	
	Qena	10	10	—	—	—	
	Luxor	58	58	—	—	—	
	Armant	18	18	—	—	—	
	Mataana	48	46	2	—	—	
Aswan	Kom Ombo	69	67	2	—	—	
	Aswan	5	5	—	—	—	
TOTAL		1,421	1,054	237	29	74	28 Culex

TABLE 124.—SHOWING NUMBER OF VILLAGES SURVEYED AND BIRKAS FOUND HARBOURING LARVAE OF ANOPHELES AND CULEX PAPIENS, IN LOWER EGYPT AND CANAL GOVERNORATES DURING 1951

Province or Governorate	Station	No. of Villages Surveyed	No. of Birkas examined	Positive		Birkas harbouring Anopheles larvae			Birkas harbouring Culex Papiens
				No.	%	Phar.	Mult.	Other species	
Canal	Ismailia	9	79	37	—	26	1	12	37
Suez... ..	Suez	4	40	22	—	—	—	—	22
Western Desert ...	Siwa	—	—	—	—	—	—	—	—
	Baharia	—	—	—	—	—	—	—	—
	Wadi el Natroun	4	18	—	—	—	—	—	—
Behera ...	Idkou	—	—	—	—	—	—	—	—
	Kafr el Dawar	—	—	—	—	—	—	—	—
	Damanhour	10	44	16	—	13	—	3	—
Fouadia ...	Fowa	2	2	2	—	2	—	—	—
	Dessouk	—	—	—	—	—	—	—	—
	Kafr el Sheikh	—	—	—	—	—	—	—	—
	Biala	—	—	—	—	—	—	—	—
Gharbia ...	Tanta	5	11	11	—	5	—	—	7
	Mehalla Kobra	—	—	—	—	—	—	—	—
	Belcas	2	3	3	—	—	—	—	3
Dakahlia ...	Mansoura	3	6	2	—	—	—	—	2
	Fareskour	5	7	1	—	1	—	—	—
	Dekernis	8	59	—	—	—	—	—	—
	Mit Ghamr... ..	5	5	—	—	—	—	—	—
Sharkia ...	Zagazig	12	28	27	—	9	—	—	27
	Belbeis	3	34	33	—	6	—	—	27
	Inshas	—	—	—	—	—	—	—	—
	Aboukebir	—	—	—	—	—	—	—	—
Menoufia... ..	Shebin el Kom	6	20	7	—	1	—	—	7
Kaliubia ...	Toukh	20	22	10	—	7	—	—	5
	Kaliub... ..	—	—	—	—	—	—	—	—
TOTAL		98	378	171	—	70	1	15	137

TABLE NO. 124 a.—NUMBER OF VILLAGES SURVEYED AND BIRKAS FOUND HARBOURING LARVAE OF ANOPHELES AND CULEX PIPPIENS, IN UPPER EGYPT, DURING 1951

Province or Governorate	Station	No. of villages surveyed	No. of birkas examined	Positive birkas for Larvae		Birkas harbouring Anop. Larvae			Birkas har- bouring Culex Pipiens
				No.	%	Phar.	Mult.	Other species	
Gîza	Gîza	45	113	69	—	11	—	—	21
Fayoum ...	Fayoum ...	—	—	—	—	—	—	—	—
	Abshaway ...	—	—	—	—	—	—	—	—
Beni Suef ...	Beni Suef ...	4	8	—	—	—	—	—	—
Minia	Minia	4	3	—	—	—	—	—	—
Assiut	Assiut	10	52	8	16	4	—	7	—
Southern Desert ...	Dakhla Oasis ...	—	—	—	—	—	—	—	—
	Kharga Oasis ...	—	—	—	—	—	—	—	—
Gerga	Souhag	5	20	2	5	2	—	—	—
Qena	Nag Hammadi ...	—	—	—	—	—	—	—	—
	Qena	2	6	6	—	1	—	5	—
	Luxor	4	180	—	—	—	—	—	—
	Armant	2	385	—	—	—	—	—	—
	Mataana	—	—	—	—	—	—	—	—
	Kom Ombo	7	7	5	—	5	1	1	—
	Aswan	2	2	2	—	2	—	—	—
TOTAL		85	776	92	11.85	25	1	13	63

TABLE No. 125.—QUANTITIES OF DIFFERENT LARVICIDES CONSUMED FOR MALARIA CONTROL
IN LOWER EGYPT DURING 1951

Province or Governorate	Station	Pure D.D.T. kgs.	Malariol kgs.	D.D.T. with Malariol kgs.	Water suspension kgs.	D.D.T. with Velsicol kgs.	Paris green kgs	Other kinds kgs
Canal	Ismalia	—	—	1234·892	—	—	—	—
Suez	Suez	—	—	4694·000	—	—	—	—
Western Desert	Siwa	—	—	—	—	—	—	—
	Baharia	—	—	—	—	—	—	—
	Wadi el Natroun.	—	—	1615·945	—	—	—	—
Behera ...	Idkou	17	6,839·500	—	2,059	—	—	129 DDT Emulsion
	Kafr el Dawar ...	—	1,294·250	—	—	2,000	—	863 Coo- king gas
	Damanhour ...	—	—	5,500	—	—	—	—
Fouadia ...	Fowa	—	—	5,272	—	—	—	—
	Dessouk	—	—	6,009	—	—	—	—
	Kafr el Sheikh ...	—	—	5,187	—	—	141	—
	Biala	—	—	4,400	—	—	—	—
Gharbia ...	Tanta	—	—	10566·250	—	—	—	—
	Mehalla Kobra ...	—	—	5785·650	—	—	—	—
	Belcas	45·4	—	5877·300	—	—	—	—
Dakahlia	Mansoura	—	10,519·500	—	—	—	—	—
	Fareskour	—	5,859·800	—	—	1,651·700	—	1,078·2 Coo king gas
	Dekernis	—	—	5686·030	—	600·000	—	—
	Mit Ghamr... ..	—	—	3706·800	—	—	—	—
Sharkia ...	Zagazig	—	—	9074·200	—	—	—	—
	Belbeis	—	8,560	—	—	—	—	—
	Inshas	—	—	—	—	—	—	—
	Abukebir	—	—	—	—	—	—	—
Menoufia	Shebin el Kom	38·2	6,652·500	—	—	—	40·15	—
	Ashmoun	—	—	3519·533	—	—	—	—
Kaliubia ...	Toukh	—	—	6549·000	6,561·8	—	—	—
	Kaliub... ..	—	—	10752	—	—	—	—
TOTAL		100·6	39,725·550	95225·6	8,620·8	4,251·7	181·10	1,941·2

TABLE No. 125 a.—QUANTITIES OF DIFFERENT LARVICIDES CONSUMED FOR MALARIA CONTROL IN UPPER EGYPT DURING 1951

Province or Governorate	Station	Pure D.D.T. Kgs.	Malaria Kgs.	D.D.T. with Malaria Kgs.	Water suspension Kgs.	D.D.T. with Velsicol Kgs.	Paris green Kgs.	Other kinds
Giza	Giza	—	—	30.626	—	—	—	—
Fayoum	Fayoum	—	—	—	—	—	—	—
	Abshaway	—	—	—10.841	—	—	—	—
Beni Suef	Beni Suef	—	—	8,801.250	16	900	—	967 Kerosene
Minia	Minia	—	—	14,700.380	—	—	—	—
Assiut	Assiut	—	—	3,263.455	—	—	—	—
Southern Desert	Dakhla Oasis	—	—	—	—	—	671.500	1,450 D.D.T. Oil
	Kharga Oasis	—	—	2,875.275	—	—	498.750	—
Geiga	Souhag	—	—	2,122.750	—	—	—	1,252 Velsicol
Qena	Nag Hammadi	—	—	6,524.550	—	—	—	—
	Qena	—	—	1,268.545	—	—	—	—
	Luxor	107.121	—	4,668.275	—	—	—	—
	Mataana	—	—	4,915.345	—	—	—	22,500 Fatak
Aswan	Kom Ombo	—	—	79,73.328	—	—	—	—
	Aswan	—	—	51,13.950	—	—	—	—
TOTAL		107.121	—	103,794.103	16	900	1,170.250	
TOTAL: Lower Egypt		100.600	39,725.550	95,225.600	8,620.800	4,251.700	181.150	
GRAND TOTAL		207.721	39,725.550	19,901.703	8,636.800	5,151.700	1,351.400	

TABLE No. 126.— NUMBER OF WARNINGS AND P.Vs. OF CONTRAVENTION SERVED OUT BY MALARIA UNITS
IN UPPER AND LOWER EGYPT DURING 1951

Province or Governorate	Units	Burrow Pits or Puddles		Filling in or Covering over disused wells or sakias and abolishing pumps		Clearing Drains or miskas		Prohibition of Rice and Sugar cane cult.		Evacuation or Covering of Cesspits	
		Ws.	P.Vs	Ws.	P.Vs	Ws.	P.Vs	Ws.	P.Vs	Ws.	P.Vs
LOWER EGYPT	Canal ...	1	—	22	6	—	—	—	—	—	—
	Behera...	11	1	—	—	—	—	—	76	—	—
	Gharbia ...	2	—	—	—	—	—	—	3	—	—
	Dakahlia ...	—	—	—	—	13	1	—	—	—	—
	Menoufia ...	—	—	—	—	5	1	—	—	—	—
	Sharkia ...	7	2	3	—	1	—	—	—	—	—
	...	—	—	7	1	—	—	—	—	—	—
	Zagazig ...	3	—	5	1	—	—	—	—	—	—
	Toukh ...	10	—	1	—	—	—	—	—	—	—
	Kaliub ...	—	—	—	—	—	—	—	—	—	—
	TOTAL ...	34	3	38	8	19	2	—	79	—	—
UPPER EGYPT	Giza ...	37	3	8	2	7	4	—	—	15	6
	Fayoum ...	6	—	3	—	—	—	—	—	—	—
	Beni Suef ...	9	—	—	—	1	—	—	—	—	—
	Assiut ...	—	—	5	1	—	—	—	—	—	—
	...	—	—	—	—	—	—	—	—	—	—
	Giza ...	—	—	—	—	—	—	—	—	—	—
	Abshaway ...	—	—	—	—	—	—	—	—	—	—
	Beni Suef ...	—	—	—	—	—	—	—	—	—	—
	Assiut ...	—	—	—	—	—	—	—	—	—	—
	...	—	—	—	—	—	—	—	—	—	—
	TOTAL ...	52	3	16	3	8	4	—	—	15	6
	GRAND TOTAL ...	86	6	54	11	27	6	—	79	15	6

TABLE No. 127.—QUANTITIES OF DIFFERENT DRUGS ADMINISTERED FOR TREATMENT
OF POSITIVE CASES, IN LOWER EGYPT DURING 1951

Province or Governorate	Station	Quinine 5 Gr.	Quinine 2 Gr.	Quinine chocolate	Atebrine.	Plasmochin $\frac{1}{2}$ Cm.	Plasmochin 1 Cm.	Blaud's Pills	Paloudrin	Aralin
Canal	Ismailia	—	—	—	—	—	—	—	—	—
Suez	Suez	—	—	—	85	—	—	—	—	—
Western Desert	Siwa	195	30	45	4,951	—	—	50	—	—
	Baharia	—	—	—	—	—	—	—	—	—
	Wadi el Natroun.	—	—	—	12	—	—	1,000	—	—
Behera	Idkou	268	1,427	—	6,872	272	65	3,754	—	165,5
	Kafr el Dawar ...	24	—	—	808	—	—	2,917	—	333
	Damanhour ...	—	—	135	306	42	—	1,640	—	467
Fouadia	Fowa	—	—	—	1,298	—	—	2,120	—	—
	Kafr el Sheikh ...	—	—	49	3,477	—	—	3,361	—	—
	Dessouk	707	1,164	1,116	4,117	—	—	4,792	—	84
	Biala	37	—	—	910	—	—	1,000	—	—
Gharbia	Tanta	—	—	38	1,973	—	60	2,500	—	10
	Mehalla Kobra	—	—	—	2,591	—	—	3,203	—	—
	Belcas	—	—	—	1,000	—	—	1,000	—	—
Dakahlia	Mansoura	—	—	—	753	—	—	1,260	—	—
	Fareskour	—	—	—	2,767	—	—	5,596	—	—
	Dekernis	—	—	—	1,109	—	—	2,135	—	—
	Mit Ghamr ...	—	—	—	3,465	—	—	1,900	—	—
Sharkia	Zagazig	—	—	—	665	—	—	740	—	—
	Inshas	—	—	267	9,708	76	—	7,017	—	370
	Belbeis	3,516	1,395	—	2,464	—	34	970	469	—
	Abu Kebir ...	—	—	—	—	—	—	—	—	—
Menoufia... ..	Shebin el Kom ...	—	—	—	12,473	—	—	3,095	—	—
	Ashmoun	—	—	—	610	—	—	—	—	—
Kaliubia	Toukh	—	—	—	10,063	—	—	—	—	—
	Kaliub... ..	—	—	88	1,667	—	555	1,230	—	—
TOTAL		4,747	4,016	1,732	74,144	390	714	50,310	469	2,399.5

TABLE No. 127 a.—QUANTITIES OF DIFFERENT DRUGS ADMINISTERED FOR TREATMENT OF POSITIVE CASES IN UPPER EGYPT DURING 1951.

Province or Governorate	Station	Q ne 5 Gr,	Q ne 2 Gr,	Q ne Choco- late	Ateb n	Plasmocbin comp 1 Cmn	Blaud's Pills	Paloudrin	Aralin
Giza	Giza	—	—	110	7,167	128	2,113	—	20
Fayoum	Fayoum	—	—	2,789	6,352	3,000	7,332	—	—
	Abshaway	—	—	—	741	—	—	—	—
Beni Suef	Beni Suef	—	—	—	5,680	—	7,153	—	—
Minia	Minia	—	—	100	1,595	—	395	—	—
Assiut	Assiut	—	—	40	1,822	—	4,301	—	—
Southern Desert	Dakhla Oasis ...	72	—	—	1,227	—	921	—	—
	Kharga Oasis ...	500	—	—	120	—	6,000	—	30
Gerga	Souhag	—	—	—	—	—	—	—	—
Qena	Nag Hammadi ...	—	—	—	7,000	—	2,300	—	—
	Qena	—	—	—	3,825	—	—	—	—
	Luxor	—	—	—	13,000	—	2,500	—	—
	Mataana	—	—	—	12,500	—	3,500	—	—
Aswan	Kom Ombo	—	—	—	—	—	—	—	—
	Aswan	—	—	—	16,000	—	—	—	—
	Bellana	—	—	—	—	—	—	—	—
TOTAL UPPER EGYPT		572	—	3,039	77,029	3,128	36,515	—	50
TOTAL LOWER EGYPT		4,747	4,016	1,732	74,144	390	50,310	469	2399.5
GRAND TOTAL		5,319	4,016	4,771	151,173	3,518	86,825	469	2449.5

TABLE NO. 128.—FAYOUM CAMPAIGN EXPENDITURE (FROM JAN. TO DEC. 1951)

General Budget :—

Title I

		L.E.	Mills.	L.E.	Mills.
Item	a Salaries (Permanent and Temporary Posts).	152	845		
„	c Salaries (Hors-Cadre)	294	208		
„	h (Infection Allowance)	65	500		
„	h (Social Bonus)	49	578		
				562	131

Title II

Item	2 (Transport & Travelling)	10	894		
„	5 (Rent)	168	120		
„	5 (Water)	1	377		
„	7 (Telegraphs)	5	316		
„	8 (Miscellaneous)	0	450		
„	10 (Supplies)	1,834	282		
„	13 (Maintenance)	1	855		
„	14 (Porterage)	4	900		
				2,027	188

Title III

		L.E.	Mills.		
Item	19 (New Works)	13,760	026		
Other	works : Purchase of benzine, oil and motor-car repairs	331	899		
				14,091	925
Item	22 “Wages Army Labour”	24	600		
Emergencies :	High cost of living allowance	11,162	470		
Against	Gambia Funds... ..	72	450		
Item	24 “Cadre Amelioration”	3	036		
				25,354	481
				27,943	800
	GRAND TOTAL				

Exclusive of cost of Insecticides debited against Item No. 10 “Supplies”,
amounting to L.E. 38,518·996 mills.

Chapter XXII—Insect Control

Mosquito Control Branch

A.—*The experimental station :*

1.—*Malaria school :*

Two groups of 5 engineers each, and a group of 4 laboratory assistants have attended the Senior and Junior courses respectively and all passed with success.

Dates of the Senior courses were from 10/3/51 to 23/6/51 and from 27/10/51 to 6/2/52. Dates of the Junior courses were from 10/2/51 to 21/5/51

2.—*Collection :*

New additions were made following the survey of El Tor, Red Sea Coast, Dakhla and Kharga oases. Teaching collections of blood films and insects were expanded.

3.—*Sorsok :*

Houses of this small village (113 houses) were spray-painted once in July with a 15% arkotin diluted to 5% to study the effect of spray-painting alone (i.e. without any treatment of breeding places which abound in neighbouring rice cultivations) on mosquitoes and malaria.

Results :

(1) No effect on the larval density.

(2) No effect on the ratio of positive houses for adults.

(3) Not a single malaria case among infants (less than 1 year), and only one relapsing case among children of 5–12 years old and not a single case among adults examined in June.

(4) Cost : 158 milliemes per head.

4.—*El Khosous :*

Breeding places within one kilometer around this village are sprayed with 3.5 % Gammexane in malariol. This process is considered as a model demonstrattion for students of the Malaria School.

Results :

(1) Decrease in the ratio of positive units for anopheline larvae in the period from January to the end of July, compared to the same period in 1949 or 1950. Whereas the highest ratio in 1949 was 6.7%, this became 1.04 % in 1951, and never exceeded 1.26% in May.

(2) In August and September, however, this ratio increased to 3 and 3.3% as compared to 1.17% and 0.18% in the preceding year. This is attributed to the use of a kind of thick malariol having poor spreading power. The section was informed in time of its bad quality.

(3) Ratio of adult mosquitoes decreased appreciably compared to 1949 or 1950. If July is taken as a standard (having the highest figures in all three years) it is observed that the ratio of positive houses for adult mosquitoes was 30.9% in 1949 and fell to 12% in 1950 and to 6.8% in 1951.

(4) Only two cases of malaria were recorded in 1951 or a ratio of 0.12% as against 0.3% in 1950.

(5) *Cost :*

Totalled L.E. 811.615 Mills. or 203 mills. per head per year.

B.—*Field station :*

I.—*Dakhla and Kharga oases :*

The two oases were surveyed in May to ascertain the extent of the area reinfected with *A. sergenti*. *A. sergenti* was previously eradicated from the two oases during 1946–1948. It was not heard of until April 1951, when it was reported from Dakhla oasis.

(1) Survey proved that Kharga was still free from *A. sergenti*. Larvae of *A. pharoensis* and *A. multicolor* were found and only adults of *A. multicolor*.

(2) Larvae and adults of *A. sergenti* were found in all villages of Dakhla except Teneda and Balat.

(3) *A. sergenti* specimens came mostly from Rashda, Mouchia and Gedida and to a lesser extent from Kasr and Fatima and least from Maasara. The distribution of *A. sergenti* indicates the presence of a focus which lies in the triangle joining Rashda, Mouchia and Gedida.

(4) Larvae and adults of *A. multicolor* and *A. pharoensis* were found in all villages.

(5) Source of reinfection with *A. sergenti* is probably through planes coming from Farafra oasis and landing at Rashda aerodrome about the end of June 1949.

(6) A post for flitting vehicles leaving Dakhla for Kharga was established to protect the latter from reinfestation.

(7) It is planned to eradicate *A. sergenti* from Dakhla again in 1952.

P.S—Survey of Dakhla and Kharga lasted two weeks — from 16/5/51 — 31/5/51.

II.—Tor :

Reports were received that the death rate in Tor was above the normal. Malaria was suspected as the cause on the assumption that *A. Gambia* might have escaped on board vessels arriving from Arabia.

Tor is a port on the Red Sea with a population of 1500 inhabitants. It is a narrow strip of land parallel to the sea together with 3 or 4 scattered areas only a few kilometers from the main port.

Breeding places in Tor are the following :

(a) *Infiltration water* :

In which *A. d'thali*, *A. multicolor* and *A. sergenti* and *Culex deserticola* were found.

(b) *Springs and spring channels* :

Suitable for drinking and irrigation. *A. d'thali*, *A. sergenti* and *Culex pipiens* were found.

(c) *Wells* :

In houses. *C. pipiens* and *Theobaldia longiareolata* were found. No gambiae larvae were found : nor do favourable gambiae breeding places exist in Tor.

One adult *A. sergenti* was caught in a house — other adult mosquitoes caught were all *Culex pipiens*.

242 blood films were taken and all were negative for malaria.

Causes of death were attributed to other factors than malaria.

Tor was surveyed from 11-1-1951 — 16-1-1951.

III.—Red Sea Ports : (from 12/2/1951 — 23/2/1951).

Red-sea ports were surveyed for *Aedes aegypti* and *Anopheles gambiae* that might have invaded the coast from Saudi Arabia.

Ras Ghareb :

Is 240 kilometers to the South of Suez. Population 4,000, a modern town. All buildings are spray-painted regularly. Flies are the chief trouble but not mosquitoes. No surface water favourable for mosquito breeding exists. Zeers are present in some houses but all were negative for *Aedes* larvae.

Hurghada :

Is 400 kilometers to the South of Suez. Population 1,000. The port receives ships arriving from Suez and occasionally from Saudi Arabia. A ship from Saudi Arabia was examined and found negative for larvae and adult mosquitoes.

Two other ships were also negative and so were 61 houses for adult mosquitoes and 133 units for larvae.

Safaga :

Is 460 kilometers to the South of Suez. Population 800. No wells or any surface water present. 8 houses were examined for adults and 17 units for larvae — all negative.

Om el Howaytat :

Is 30 kilometers from Safaga. A very small village. Larvae and pupae of *Theobaldia* were found but no adults.

Kosseir :

Is 540 kilometers to the South of Suez. Population 5,000. *A multicolor* larvae were found in seepage water. *Culex pipiens* and *Theobaldia longioreolata* larvae were found in wells inside houses. A single larvae of *Aedes aegypti* was found in a similar well.

Five adult females of *Aedes aegypti* and 10 male and female *Culex pipiens* were caught in houses. 409 blood films from all the above mentioned ports were examined for malaria — all negative.

IV.—*Siwa :*

Siwa oasis was surveyed in 1950 for larvae mosquitoes and malaria. In 1951 all houses (1,059) were spray-painted with Gammexane wettable powder four times in February, May, August and November to investigate the effect of residual insecticides on mosquitoes and malaria by spray-painting without any larvicidal operations. (Breeding places in Siwa are so vast that it is practically impossible to eradicate mosquitoes through larviciding).

Results :

- (1) Ratio of positive units for anopheline larvae in general decreased from 9.5% in 1950 to 7.5% in 1951.
- (2) Ratio of positive units for *A. sergenti* larvae decreased from 5.6 % in 1950 to 3.5% in 1951.
- (3) Ratio of positive units for *A. multicolor* was not affected.
- (4) Average number of mosquitoes per house decreased from 14 in 1950 to 5.4 in 1951.
- (5) Average number of *Culex* mosquitoes per house was not affected.
- (6) Average number of *A. sergenti* per house decreased from 10 in 1950 to 3.2 in 1951.
- (7) Average number of *A. multicolor* per house decreased from 3 to 1.3.
- (8) Effect of insecticide was greater on anophelines generally than on Culicine and on *A. sergenti* than on *A. multicolor*.
- (9) Malaria disappeared in infants and decreased in all other ages after spray-painting.
- (10) Spray-painting houses failed to eradicate anophelines but was adequate for malaria control.

C. *Laboratory :*

(a) *Blood Films examined in the Laboratory During 1951.*

TABLE No. 129

Region	No. of specimens	Negative	Positive	Species		
				P. vivax	P. folci	P. malaria
Khosous	1,630	1,628	2	1	1	—
Sorsok	971	970	1	1	—	—
Siwa	3,861	3,578	283	2	139	142
Dakhla and Kharga	1,038	1,038	—	—	—	—
Red Sea	409	409	—	—	—	—
Inshas	234	233	1	1	—	—
TOTAL	8,143	7,856	287	5	140	142

TABLE No. 130.—Mosquito Larvae Examined in the Laboratory during 1951.

Region	No. of specimens	Anopheleine	Culicini	Anopheine						Culicini												
				Coastani	Algeriensis	Pharoensis	Sergenti	Multicolor	1st. stage	Uranotaenia	Theobaldia	A. aegypti	A. caspius	A. detritus	C. pipiens	C. laurenti	C. puellus	C. deserticola	C. porciilepes	C. unirtatus	Culex 1st stage	C. thulu
Khosous ...	634	215	509	2	—	191	—	—	22	—	2	—	109	—	125	270	—	—	—	—	—	—
Sorsok ...	1,266	752	808	9	—	732	—	—	11	1	5	—	123	—	146	524	—	—	—	—	—	3
Ezbet el Nakhl ...	944	227	817	2	—	220	—	—	5	1	56	—	44	—	579	116	—	—	—	—	—	2
Gabal Asfar ...	1,505	155	1,540	—	—	144	—	—	6	8	6	—	351	—	441	724	2	—	—	—	—	5
Siwa ...	9,275	6,673	4,251	—	172	—	3,243	3,100	158	41	126	—	2,700	123	546	—	648	64	—	—	—	4
Kharga ...	173	139	46	—	—	116	—	18	5	—	1	—	2	—	7	14	—	—	—	—	—	1
Special service ...	63	43	39	12	—	31	—	—	—	—	2	—	4	—	6	27	—	—	—	—	—	—
Aswan... ..	22	22	1	—	—	20	—	—	2	—	—	—	—	—	—	1	—	—	—	—	—	—
Nag Hammadi ...	109	28	—	—	—	28	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Helopolis ...	427	4	423	—	—	2	—	—	2	—	2	—	19	—	399	—	—	—	—	—	—	—
Alexandria ...	721	20	730	17	—	1	—	—	2	9	14	—	58	—	576	58	6	—	—	—	—	—
Suez ...	158	5	162	—	—	1	—	—	—	—	—	—	16	—	141	4	—	—	—	—	—	—
Port-Said ...	26	—	27	—	—	—	—	—	—	—	—	—	10	—	17	—	—	—	—	—	—	—
Ismailia ...	4	—	4	—	—	—	—	—	—	—	—	—	—	—	4	—	—	—	—	—	—	—
Hurghada ...	11	—	10	—	—	—	—	—	—	—	—	10	—	—	—	—	—	—	—	—	—	—
Kosseir ...	5	1	4	—	—	—	—	—	—	—	—	2	—	—	2	—	—	—	—	—	—	—
Luxor ...	4	—	4	—	—	—	—	—	—	—	—	—	—	—	4	—	—	—	—	—	—	—
Mersa Matrouh ...	1	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—
Special Service ...	22	—	22	—	—	—	—	—	—	—	—	—	—	—	22	—	—	—	—	—	—	—
TOTAL ...	15,370	8,284	9,398	42	172	1,486	3,243	3,128	213	60	215	12	3,436	123	3,025	1,741	658	64	13	19	15	9

TABLE No. 131—ADULT MOSQUITOES EXAMINED IN THE LABORATORY DURING 1951.

Region	No of Speci- mens	Ano- phe- line	Culi- cini	Anopheles			Culicini			Culex
				Pharo- ensis	Sergen- ti	Multi- color	Theo- baldia	A. aegy- pti	A. cas- pius	
Khosous	1,738	137	1,731	130	—	7	8	—	15	1,708
Sorsok	1,300	404	1,188	402	—	2	3	—	13	1,172
Ezbet el Nakhl	1,600	24	1,597	41	—	1	2	—	10	1,585
Gabal Asfar	1,506	9	1,682	7	—	2	1	—	194	1,487
Inshas	17	3	17	3	—	—	—	—	—	17
Siwa	3,676	3,710	1,771	—	1,732	1,978	26	—	473	1,272
Suez	35	—	25	—	—	—	—	—	—	25
Ismailia	7	—	7	—	—	—	—	—	—	7
Special Service	9	—	9	—	—	—	—	—	—	9
TOTAL	9,868	4,305	8,027	583	1,732	1,990	40	—	705	7,282

RABLE No. 132.—YELLOW FEVER BRANCH — ANNUAL RECORDS OF 1951.

Month	No. of Specimens	Double sp.	Empty	Aedes			Culex			Anopheles					Theobaldia		Uranotaenia	TOTAL
				Aegypti	Caspius	Others	Pipiens	Laurenti	Others	Sergenti	Pharocensis	Multicolor	1st stage	A. coustani	Longia-reolata	Others		
January ...	115	4	—	—	10	—	85	8	1	—	—	—	10	—	4	—	1	119
February ...	126	4	—	—	18	—	105	—	1	—	—	4	1	—	1	—	—	130
March ...	55	—	—	—	3	—	51	1	—	—	—	—	—	—	—	—	—	55
April ...	94	2	—	—	3	—	88	—	2	—	—	—	—	—	3	—	—	96
May ...	117	—	—	—	6	—	105	2	2	—	—	—	1	1	5	—	—	122
June ...	54	—	3	—	1	—	50	1	1	—	—	1	1	—	1	—	—	56
July ...	108	2	3	—	10	—	92	1	—	—	2	—	—	1	—	—	1	107
August ...	95	4	1	2	9	—	81	4	—	—	—	—	—	—	1	—	—	98
September ...	99	1	2	2	1	—	82	2	1	—	1	—	2	—	—	—	—	97
October ...	163	2	1	—	2	—	144	17	1	—	—	—	—	—	—	—	—	138
November ...	197	8	—	1	16	—	167	11	1	—	—	—	—	1	2	—	6	205
December ...	110	7	—	1	14	—	94	6	—	—	—	—	—	—	—	—	2	117
TOTAL ...	1,333	40	11	12	93	—	1,144	53	10	—	3	5	15	3	17	—	10	1,361

TABLE NO. 133.—YELLOW FEVER BRANCH — ANNUAL RECORDS.

Month	No. of houses examined	No. of units examined	No. of closed houses	No. of closed units	No. of vacant houses	No. of vacant units	No. of New houses	No. of New units	No. of inaccessible houses	No. of inaccessible units	No. of houses positive for A.egypti	No. of units positive for A.egypti	No. of houses positive for other larvae	No. of units positive for other larvae	No. of houses positive for pupae	No. of units positive for pupae	No. of open lands positive for larvae	No. of open lands positive for pupae	No. of open lands positive for A.egypti
January	49,528	104,009	3,860	10,975	350	400	471	1,041	75	211	—	—	17	17	—	—	98	—	—
February	39,736	177,088	3,807	8,591	312	455	352	973	58	157	—	—	42	42	—	—	84	—	—
March	39,637	82,708	3,929	9,982	282	494	537	1,464	62	—	—	—	13	13	—	—	42	—	—
April	47,087	106,686	4,229	13,407	295	532	558	1,470	105	308	—	—	27	27	—	—	67	—	—
May	36,524	88,032	3,306	10,035	243	387	391	1,046	80	267	—	—	51	51	—	—	66	—	—
June	25,393	59,711	2,043	7,575	167	326	298	1,049	34	165	—	—	31	31	—	—	23	—	—
July	39,641	93,262	3,128	12,546	182	395	592	2,589	67	166	—	—	71	71	—	—	91	—	—
August	37,103	77,616	2,996	11,384	238	429	398	2,066	40	127	3	3	34	34	—	—	58	—	—
September	32,386	69,173	2,870	10,157	160	340	459	1,843	37	139	7	7	13	13	—	—	70	—	—
October	44,891	101,027	3,964	13,129	353	696	612	2,189	75	276	—	—	41	41	—	—	127	—	—
November	41,408	93,919	3,406	12,788	297	1,032	653	2,119	57	265	1	1	25	25	—	—	163	—	—
December	39,029	82,366	2,952	10,952	262	7,553	570	2,000	73	285	1	1	11	11	—	—	72	—	—
TOTAL	442,264	1,135,597	40,490	131,521	3,141	13,041	5,896	12,949	763	2,316	12	12	322	322	—	—	964	—	—

TABLE No. 134.—YELLOW FEVER BRANCH — ANNUAL RECORDS.

Month	Breeding Places											Positive for larvae		Positive for pupae.	
	Fire taps	Cisterns	Wells	Pits	Drains	Basins	Boxes	Wooden receptacles	Metal receptacles	Earthenware receptacles		Other places	Aedes		Non-Aedes
										Zeers	Others				
Jan. ...	1.170	1.425	547	6.598	2.240	7.426	30.747	474	81.412	22.385	40.971	33.427	—	115	—
Feb. ...	923	1.092	425	6.832	2.043	5.767	2.848	908	64.845	21.271	30.177	24.175	—	176	—
Mar. ...	1.289	1.356	394	6.305	2.410	11.137	32.801	1.358	67.534	16.284	28.954	30.775	—	55	—
Apr. ...	1.245	1.672	587	7.876	3.242	10.525	40.721	666	89.130	20.754	36.428	40.139	—	94	—
May. ...	1.260	1.384	525	6.387	2.276	9.720	9.738	561	74.563	16.464	85.263	32.756	—	117	—
June. ...	993	1.093	221	4.415	1.581	6.875	26.289	227	53.104	12.072	15.472	24.920	—	54	—
July. ...	1.386	1.364	—	5.984	2.610	9.627	33.271	598	71.574	19.377	23.187	30.765	—	108	—
Aug. ...	1.316	1.205	449	5.301	1.959	8.764	28.009	402	69.564	15.446	79.789	28.049	3	92	—
Sept. ...	1.140	1.205	339	5.689	1.389	8.455	27.350	456	61.464	14.496	24.434	27.691	7	92	—
Oct. ...	1.477	1.542	643	7.724	1.914	10.778	44.384	505	92.128	20.857	34.193	42.231	—	162	—
Nov. ...	1.177	1.256	591	7.619	2.193	6.745	37.605	1.056	81.377	20.444	26.696	35.106	1	188	—
Dec. ...	1.179.	1.423	510	7.545	2.475	7.473	35.870	632	79.298	16.737	25.296	32.923	1	83	—
TOTAL ...	14.555	16.017	5.621	78.675	26.332	103.292	374.833	7.843	886.993	216.587	390.854	382.657	12	1,286	—

FLY BRANCH.

Experiments on fly control by different methods were continued :

(a) in a normal village (b) in a model village (c) in a sewage farm. (d) in a desert village and (e) in a town.

Different insecticides were used e.g. chlordane, DDT, Gammexane and Pyrethrum. The following methods were used :

- (1) Water suspensions for spray-painting mud walls and spraying breeding places.
- (2) Powders for dusting breeding places.
- (3) Solutions for painting smooth walls.
- (4) Mist for direct attack on flies or spraying W.C.s.
- (5) Fog for direct attack on flies.

The insecticides were applied in the following doses :

TABLE No. 135

Insecticide	Form	Dilution	Dose of Pure Insecticide
DDT	50% water suspension	5%	2 mg./m ²
„	Kerosene solution	50%	2 mg./m ²
„	Heavy oil solution	20%	(fog.)
Gammexane ...	50% water suspension	8%	200 mg/m ²
„	Concentrated solution 10% ...	5%	200 mg/m ²
„	10% powder (1.3% gamma) ...	as it is	130 mgs. gamma
Chlordane ...	40% water suspension	8%	3.2 gm/m ²
„	Kerosene solution	5%	2 gm/m ²
„	40% powder	5%	0.5 gm/m ²
Pyrethrum extract	15% pyrethrin	0.15%	direct spraying.

Estimation of results :

Poor result : over 50 flies on the grid.
 Moderate result : from 20-50 flies on the grid.
 Good „ : less than 20 „ „ „ „

(1) FLY CONTROL IN NORMAL VILLAGES :

I.—By Dusting Breeding places :

- (i) *Gammexane Alpha* : (Aboul Nomros village, Giza). The village was treated weekly for 26 times. Result was moderate for 4 weeks during May after which readings increased till the end of the year. Resistance might have developed.
- (ii) *Chlordane* : Readings were less than 20 (good) for 14 weeks (from April-June) (Treatment was weekly) Failure then started and continued till the end of the year. The five succeeding treatments produced no effect whatever.

- (iii) *Gammexane and Chlordane* : Konayesa village was treated with gammexane dust for four weeks followed by 5 % chlordane dust for 15 weeks. All results were poor probably due to resistance of flies. Attempts to overcome this resistance by direct flitting also failed. These experiments show that the insecticides remain effective for three months. Changing the insecticide may extend effectiveness for a fourth month.

II.—*Spraying Breeding places* :

8% chlordane suspension was used in Sendion village in the middle of April. Results were moderate for six weeks, and poor afterwards. Spraying with gammexane was repeated in the middle of October but without success.

III.—*Spray-painting* :

Walls were spray-painted in Torsa village with 8% gammexane in the beginning of March and middle of April. Grid counts were below 20 and the spring peak was avoided.

In June and July, however, fly densities increased again and the treatment was repeated in August without any result, since it occurred during the autumn peak.

Pyrethrum was tried in the middle of October but gave very slight reduction of flies for one week.

(2) FLY CONTROL IN A MODEL VILLAGE (Inshas) :

This village differs from normal villages in that it is well planned and clean and in that sheds are removed from dwellings.

Inshas was spray-painted twice in 1949 with DDT and gammexane successively and gave satisfactory results. In 1950 the treatment was repeated twice with DDT and results were good after the first treatment only for 5-6 weeks, the second treatment being a failure. A third treatment with chlordane was tried with success for 3 weeks only. In 1951 Inshas was treated twice with gammexane in the end of February and July. Results in both treatments were satisfactory for 5-8 weeks.

(3) FLY CONTROL IN A SEWAGE FARM :

Gabal El Asfar is a village with special surroundings since it contains a station for the treatment of sewage. Houses in Gabal El Asfar were spray-painted 5 times in 1948, 49 and 50 with 5% DDT, 7.5% DDT and 4% chlordane without any result. 8% gammexane gave a distinct decrease of flies for only one week.

In 1951 drying basins were dusted with gammexane for 5 times and fogging was applied using 2% DDT and Gammexane in heavy oil. Houses were again spray-painted with gammexane. All these measures combined failed to produce any effect on flies.

It seems that fly control by insecticides in such a place where breeding is so extensive, cannot be achieved.

(4) FLY CONTROL IN A DESERT VILLAGE :

Houses in Siwa were spray-painted with gammexane 4 times as a control measure against malaria. The result of these treatments on flies was satisfactory except the third treatment (September). This may be due to the normal Autumn peak which might have been worse still had no spray-painting been applied.

(5) FLY CONTROL IN TOWNS :

A.—*Madbah District* :

Control by dusting 6 times and fogging 6 times and flitting of outdoor W.Cs 5 times from middle of March till middle of November 1951 at an average of one treatment every 2-3 weeks. The municipal sanitary service did not co-operate in the plan of control as agreed. Results were relatively satisfactory since readings were from 100-200 (normally from 800-1000). For better results, co-operation of the competent sanitary services must be maintained.

B.—*Port-Said* :

Control by dusting breeding places with 10% gammexane (1.3% gamma), fogging with 10% gamma, gammexane solution, flitting with pyrethrum and gammexane, morning and evening together with spray-painting certain buildings with gammexane did not give as good results as in 1950, though grid readings fell to 300–500 after each treatment (normally from 1500–3000). Other sanitary measures were not carried out at all.

(6) OTHER EXECUTIVE WORKS IN TOWNS :

Spray-painting of about 570 buildings including houses, aerodromes, etc. were carried out as a control measure against flies, mosquitoes and other domestic insects. Results were satisfactory especially with bed-bugs.

Conclusions :

(1) Dusting of breeding places or spraying them with suspensions may give good results in lowering the fly populations but after about 15 treatments, once every fortnight, the effect of the treatment diminishes. Change of the insecticide may result in moderate control for a month or two after which it is of no practical effect. This means that control of flies is possible to a certain extent in Spring and Summer but not in the following autumn.

(2) Spray-painting of walls at long intervals helps greatly to reduce the population of fly for about two years after which it becomes of no value.

(3) Spray-painting of walls is of no value whatever if breeding places are very extensive. In this case dusting may be of benefit for a short time after which it loses its effect even if combined with spray-painting (Gabal El Asfar and Port-Said).

(4) Therefore for control of flies, breeding places must be eliminated or reduced to a reasonable level. Spray-painting can be applied at intervals for two years during which sanitary measures of removing garbage, refuse etc. must be carried out. Control of breeding places with insecticides should not be reverted to except in cases of emergency (e.g. epidemics).

(5) Similar experiments should be carried out together with laboratory research to estimate the period and extent of resistance in flies.

REPORT OF PARASITIC INSECTS' BRANCH.

This branch undertakes field and laboratory studies of the following insects : Lice, bed-bugs, fleas and cockroaches. These studies include the life cycle of the insects, and their prevalence among inhabitants and best methods of control.

I.—FLEAS :

Three villages in Kaliubia viz. Salmania, Gaafra and Menaya were selected for the study of fleas, the first for the study of seasonal prevalence, the second and third for effects of insecticides on larvae and adult fleas.

Salmania :

All houses were surveyed weekly during the year 1951. It was found that whereas larvae were present throughout the year in all houses, the incidence of adults was variable. This points out the sensitivity of the larval indices.

Average larvae and fleas per house increases gradually from January till April when it reaches 20 larvae and 4 adults per house. From May to September the number declines gradually till it becomes 9 larvae and 2–3 adults per house.

Thereafter it increases again slowly in October, November and December.

This shows that the period from February till April is the most favourable for the breeding and spread of fleas and control should be tried during these months.

Gaafra :

The following insecticides were used to control fleas :

- (1) 4% gammexane powder at the rate of 14 gms./m².
- (2) 10% DDT powder at the rate of 14 gms/m².
- (3) 5% DDT in malariol at the rate of 100 c.cs./m².
- (4) 0.18% pyrethrin at the rate of 80 c.cs./m².

Menaya :

In this village the effect of 4% chlordane powder at the rate of 14 gms./m² and 2% chlordane suspension at the rate of 40 c.cs/m² were studied.

Conclusions :

- (1) The effect of powder is usually stronger than solutions.
- (2) Effect on larvae is more pronounced than on adults.
- (3) Nearby control houses are usually affected. This may be due to the blowing off of insecticide to these houses by wind or its spread by feet or clothes from the treated houses.
- (4) Chlordane is the most effective of all insecticides and possesses a persistent effect for the longest period.
- (5) Next to chlordane comes 4% gammexane, then DDT.
- (6) Pyrethrin has no lasting effect.
- (7) Cost of control is almost the same with the different insecticides.

II.—LICE :

(i) *Field work :*

A.—Prevalence of lice was studied by examining the out-patients of Ancylostoma Hospitals. Three provinces viz. Giza, Kaliubia and Menoufia, were chosen for these studies.

- (1) Out-patients represent the villages around the hospital.
- (2) They do not change in clean clothes before going out to the hospital.
- (3) Highest incidence of lousiness was among inhabitants of Giza, followed by those of Menoufia and lastly those of Kaliubia. The average rate of lousiness for the three provinces was 28.8% and the average number of lice per person 4.8.%
- (4) Males were more lousier than females.

B.—Tins containing 10% DDT and 4% gammexane powder were distributed to the inhabitants of Salmania for self dusting. Results were compared with other methods of hand dusting with dusters.

- (1) It was found that this method is of no value in the control of lice.
- (2) Most people dusted their beddings but not their clothes.
- (3) Dusting of clothings was not uniform.
- (4) The powder was consumed in 1-3 days only.

(ii) *In the Laboratory :*

- (1) Breeding of lice colonies and study of the life cycle.
- (2) Biological experiments on the effect of washing on DDT and gammexane impregnated-clothes.

Results :

2% DDT impregnated clothes remain toxic to lice after washing 4 times at 90°C. temperature.

Gammexane impregnated clothes remain toxic to lice after two washings only at 90°C.

(iii) *Rat Control :*

A.—*In the Laboratory :*

(1) Preliminary experiments with WARFARINE to study its toxicity on rats by mixing it in different proportions with potatoes. It was found that :

1 mg. per kilogram body-weight caused mortality after 8 days.

2, 3 and 4 mgs. per kilogram body-weight caused mortality after 6 days.

(eyes and digits showed blood congestion).

5 mgs. per kilogram body-weight caused mortality in 5 days.

(urine and faeces contained blood).

(6 mgs. per kilogram body-weight caused mortality in 4 days.

(limbs congested with blood, rat pale).

Zinc Phosphid

(2) Experiments with 3% zinc phosphid. This poison has an immediate killing effect.

B.—*In the Field* :

3% zinc phosphid was tried in the Serum laboratories and Abbassia Institute and proved effective. After a day or two, however, it was noticed that dead rats decreased in number. This is due to the fact that rats avoid the bait after killing some individuals.

IV.—*Control of Other Insects* : (Bed-bugs and cockroaches)

Bugs proved easier in control than cockroaches which needed repeated treatments. During this year, control of these insects was established in 317 buildings using the following insecticides :—

L.G. 240 solution diluted at the rate of 1 : 50, 1 : 40 and 1 : 74.

L.G. 110 solution diluted at the rate of 1 : 40.

5% D.D.T. in kerosene and 25% DDT emulsion diluted to 5%. Octochlor in kerosene diluted at the rate of 1 : 40, using also 10% DDT or 4% gammexane powders.

All these insecticides proved effective on cockroaches and bugs, the residual effect on cockroaches lasted from 6-12 weeks depending on the degree of infestation before control. A second treatment 4 weeks after the first was needed for heavy infestation (50 or more). Lesser numbers of roaches respond quickly to the action of insecticides after one treatment.

YELLOW FEVER BRANCH.

The objective of this branch is the control of mosquitoes in general and *Aedes aegypti* in particular, within 3 kilometers around air ports and sea ports which receive planes or ships arriving from yellow fever areas.

The following operations are carried out :

(1) Regular inspection of all breeding places within the defined area.

(2) Weekly application of 5% DDT in malariol to breeding places.

(3) Spraying of air-port and sea-port buildings with insecticides once every three months (this is carried out by the Mosquito Branch).

Areas of operation in 1951 :

(1) Heliopolis ; (2) Alexandria ; (3) Suez ; (4) Safaga ; (5) Hurghada ;
(6) Kosseir ; (7) Luxor ; (8) Mersa-Matrouh ; (9) Bellana.

Summary of statistics :

(1) 1,337 specimens were collected during the year, 12 were positive for *Aedes aegypti*.

(2) All *Aedes aegypti* specimens were found inside zeers.

(3) These were collected between August and December from Hurghada and Kosseir on the Red Sea.

- (4) They were found in 12 zeers among 216,587 zeers examined.
- (5) The 1,337 specimens were collected from 1,135,597 units examined.

Surveys :

(1) Canal zone in Suez and Fayed regions — no *Aedes aegypti* larvae were found. The establishment of a unit is suggested.

(2) Zagazig region — no larvae or adults of *Aedes aegypti* were found.

Recommendations :

(1) The establishment of a team of 8 persons for larval and adult surveys of all regions.

(2) The establishment of a mobile team for spray-painting dangerous places periodically.

(3) A survey of the whole of Egypt for *Aedes aegypti* should be undertaken to estimate the extent of prevalence of this mosquito.

Chapter XXIII.—Bilharzia Snail Control

In previous years the Bilharzia Snail Control Section has been assessing the results of its treatment work by comparing the spring survey of the running year with that made in the following spring. For reasons of uniformity with other government departments it was decided to conform with the calendar year. Thus the following report covers the activities of the section for the remaining 8 months of the year 1951, from May to the end of December.

In the recently included large Delta territories, the work could not be extended to the full on account of financial, staffing and other difficulties, while a measure of control was carried in the old inspectorates of Fayoum, Giza, Aswan, Qena, Beni Suef, Kaliubia, Menoufia, South and Middle Behera, as well as in the oases of the Libyan Desert.

Snail Control:

The main spring survey of 1951 which serves as a guide for treatments, has already been given in detail in the previous report and only a summary of the total figures for all provinces is given below.

TABLE No. 136.—SURVEY OF STREAMS FOR THE SNAIL
VECTORS OF BILHARZIASIS, SPRING 1951.

	Numbers	Length in kms.	Snails/ 100 dips
Surveyed	348,208	116,837	—
Totals infested	37,406	30,775	—
Inf. with <i>Bulinus</i>	31,046	29,299	11
Inf. with <i>Planorbis</i>	13,369	8,422	30

The treatment measures applied following the spring survey of 1951 are given in table 137. The cleared streams include those which were cleared under Law 29/1948.

TABLE No 137.—TREATMENT OF STREAMS, MAY - DECEMBER 1951.

Province of Inspectorate	Clearance			Sulphation			
	No. Streams	Kms.	Man/days	No. Streams	Kms.	Man/days	Tons Cuso ₄
Fayoum	812	837	10,179	2,867	3,173	6,717	220
Giza	2,401	1,317	25,062	2,169	1,982	3,979	182
Oases	—	—	—	—	—	—	9
Aswan	96	407	3,689	837	905	2,775	153
Qena	891	919	9,044	847	815	3,139	143
Kaliubia	9	10	193	22,595	2,024	4,335	171
South Behera	642	589	11,888	2,551	2,027	4,089	186
Middle Behera	2,093	1,008	22,678	7,281	3,853	7,375	197
Beni Suef	2,370	1,737	30,128	3,147	2,716	6,996	237
Menoufia	3,407	2,778	48,510	1,551	1,849	5,573	245
Gharbia	1,766	1,029	4,492	2,410	1,996	9,075	171
East Fouadia	—	—	—	519	258	303	15
West Fouadia	22	22	554	—	—	—	—
TOTAL	14,512	10,653	166,417	26,774	21,598	54,356	1,929

The Oases :

The repeated intensive sulphations, since 1946, of the heavily infested reservoirs and irrigation channels taking from various isolated artesian wells have practically eliminated *Bulinus* snails from their known places of occurrence. *Lymnaea*, the vectors of the liver fluke of cattle have been greatly reduced. A comparison of the total number of separate infections found in the oases since the beginning of the work and the present state of affairs is tabulated below :

TABLE No. 138.—SNAIL INFESTATION IN THE OASES (1946-1951)

Oasis	Wells or streams infested with			
	<i>Bulinus truncatus</i>		<i>Lymnaea cailliaudi</i>	
	Since beginning of work	in 1951	Since beginning or work	in 1951
Dakhla	72	0	112	2
Kharga	15	0	68	0
Baharia	72	1	159	75
TOTAL	159	1	339	77

Application of Law 29/1948 relative to the control of snail vectors :

During 1951 the field staff of the provinces under control made 242,037 new field registrations of streams measuring 60,071 kms. and belonging to 260,990 owners. Of 45,136 streams, or portions of streams, requiring clearance, 11,191 streams, measuring 5,664 kms. and belonging to 21,808 owners were cleared by their owners while 16,108 streams, measuring 10,600 kms. and belonging to 77,043 owners were cleared by the section at the owners' expense, at a cost of L.E. 28,822. This sum is to be collected together with land taxes.

The Laboratory :

Snail examinations.—In former years, the routine examinations for bilharzial infection were handled from 2 laboratories, the Fayoum and the Cairo centres. During 1951, five more labs were established and staffed, in the Beni Suef, Menoufia, Gharbia, West Fouadia and Middle Behera Inspectorates, the main Cairo laboratory continuing to deal with Giza and Kaliubya Provinces. The examinations performed during the year 1951 are given below.

TABLE No. 139.—SNAIL EXAMINATIONS FOR BILHARZIAL INFECTION, 1951.

Species	Samples			Snails		
	examined	infected	%	examined	infected	%
<i>Bulinus truncatus</i> ...	1,980	226	11	55,599	1,354	2
<i>Planorbis boissyi</i> ...	457	120	26	38,990	2,047	5

Survey of the Nile in Cairo area.—On the eastern bank of the Nile a stretch of about 12 kms, from the southern harbour of Athar-en-Nabi to the northern harbour of Rod-el-Farag, was examined for snails harbouring bilharzia infection and 27 out of 2,114 *Bulinus* were found infected with *Bilharzia heamatobia*. Snails and infections were distributed fairly evenly within this length except in a short pitched stretch between Qasr el Nil and Boulaq bridges which is not used by the population and where snails were few and infection absent. The shores of 5 permanent islands within the same limits were also surveyed and infections (11 out of 1,077 *Bulinus*) were found in the northernmost of these, Roda and Gezira islands, both lying in the residential zone of Cairo, especially in the narrow weedy channels separating the islands from the bank of the river.

Chapter XXIV—Leprosy Control

It has been the policy of the Ministry since leprosy control was started in 1929 to provide a main leprosy clinic in each capital of province with an isolation quarter and four branches in neighbouring districts for the examination, treatment and isolation of the largest number of lepers.

Under law No. 131 of 1946, the isolation of lepers is compulsory. Special leprosy colonies have been established and provided with all living facilities for the segregation of lepers and protection of the population against infection.

General Statistics :

During the year, a total of 1,843 persons presented themselves to leprosy units for examination. Of this number, 757 patients were found leprous, as compared with 2,055 and 1,086 respectively during 1950.

This brings the total number examined since 1929 to 35,469 of whom 17,579 were leprous.

Perusal of records shows that 118 out of the 757 found leprous this year were repeatedly recorded in more than one unit. This leaves 639 new lepers recorded this year as against 783 in 1950.

Of the 17,579 lepers on record since 1929, 4,455 were repeatedly recorded in more than one unit. This leaves 13,123 lepers proper on records at the end of 1951.

The following table No. 140 gives the number of lepers recorded during the year by the different main clinics and branches :

TABLE No. 140

Unit	Branches	No. of lepers	Total
Abu Zaabal Leprosy Colony	—	92	92
Amria Leprosy Colony	—	38	38
Cairo Leprosy Hospital	Main Clinic	—	146
	Imbaba	20	
	Karamidan	109	
	Kaliub... ..	17	
Zagazig Leprosy Clinic	Main Clinic	27	54
	Abu Hammad	—	
	Shebin el Kanater	12	
	Minia el Kamh	10	
	Abou Kebir	5	
Souhag Leprosy Clinic... ..	Main Clinic	32	74
	Tema	17	
	Gerga	6	
	Tahta	15	
	Akhmim	4	
Tanta Leprosy Clinic	Main Clinic	52	63
	Mehalla el Kobra	3	
	Zifta	3	
	Kallin	2	
	Dessouk	1	
	Kafr el Zayat	2	
Minia Leprosy Clinic	Main Clinic	13	58
	Bani Mazar	4	
	Abou Kirkas	11	
	Samallout	17	
	Mellawi	13	
Alexandria Leprosy Clinic	Main Clinic	20	35
	Damanhour	12	
	Rosetta	3	
	Idkou	—	
Mansoura Leprosy Clinic	Main Clinic	30	49
	Damietta	5	
	Sinbellawein	5	
	Sherbin	3	
	Dekernis	6	
Shebin el Kom Leprosy Clinic	Main Clinic	17	76
	Menouf	25	
	Ashmoun	1	
	Quesna	8	
	Benha	11	
	Tala	14	
Qena Leprosy Clinic	Main Clinic	7	27
	Luxor	6	
	Kous	5	
	Deshna	6	
	Nag' Hammadi	3	
Beni Suef Leprosy Clinic	Main Clinic... ..	34	45
	Beba	5	
	Wasta	6	

936 lepers were in segregation at Abu Zaabal and Amria colonies, Cairo Leprosy hospital and other unit segregation quarters at the end of the year as follows:—

Abu Zaabal Leprosy Colony	...	...	...	636
Amria	„	„	...	261
Souhag	„	Clinic	...	6
Tanta	„	„	...	2
Minia	„	„	...	17
Mansoura	„	„	...	10
Qena	„	„	...	4
TOTAL				936

The ratio of attendance for treatment was this year about 29%, as indicated herebelow :

TABLE No. 141

Month	No. of attendances (Visitors)	Rate
		%
January	14,215	30
February	9,634	35
March	11,721	31
April	12,210	32
May	12,357	28
June	10,201	24
July	12,298	25
August	11,794	30
September	9,184	27
October	13,075	29
November	11,079	30
December	10,009	28

Treatment :

Hydnocarpus oil is used in the treatment of all lepers. This is given intramuscularly in a weekly dose of approximately 4 c.cs. The treatment with Sulphone compounds is still in the experimental stage at Abu Zaabal and Amria colonies. The results are so far good.

A total of 128,262 hydnocarpus oil injections weighing 545 kilogrammes were given to lepers this year as against 128,056 injections weighing 583 kgs. in the previous year. The number of dressings was 196,307 as against 203,134 in 1950.

The following table No. 142 gives the monthly details :

TABLE No. 142

Month	Number of injections	Quantity of oil	Number of dressings
January	12,721	59,488	20,357
February	9,483	41,440	15,290
March	10,318	47,412	15,964
April	11,596	57,594	16,267
May	11,703	49,256	16,416
June	9,188	42,883	14,549
July	11,286	51,634	15,436
August	11,265	52,630	16,055
September	6,859	32,214	15,218
October	12,844	43,440	18,788
November	11,954	36,320	16,026
December	9,045	31,111	15,941
TOTAL	128,262	545,422	196,307

Besides leprosy treatment, lepers are also treated from other diseases from which they may be suffering.

ABU ZAABAL LEPROSY COLONY.

Patients :

Of 205 lepers admitted to the colony during the year, 92 (69 males and 23 females) have not been segregated in the colony before.

Discharges during the year numbered 209 as follows :

- 87 Went on leave and did not return.
- 63 Deserted.
- 45 Released from the Colony prison.
- 14 Died.

Causes of death were :

- | | |
|---------------------------|--------------------------|
| 1 Pneumonia | 1 Cancer. |
| 1 Pulmonary Tuberculosis. | 2 Oedema and Leprosy. |
| 2 Heart Failure. | 5 Enteritis and leprosy. |
| 2 Bronchitis. | |

The number of lepers in segregation on December 31, 1951 was 636 as against 637 in the previous year.

Technical Works :

(1) Examination of the 92 new patients showed that 48 were of the anesthetic type, 3 of the tubercular type and 41 of the mixed type. Examination of the 113 re-isolated lepers showed that 69 were of the anesthetic type, 7 of the tubercular and 69 of the mixed type.

(2) Bacteriological examination of samples from nose and skin of all lepers in segregation, numbering 636, gave the following results : 285 positive for nose — 89 positive for skin — 150 positive for nose and skin and 112 were negative for nose and skin. It was also revealed that 14 of the lepers were positive and become negative, 5 negatives became positive and 617 remained without change.

(3) The annual clinical examination of all residents in the colony showed that the condition of 497 lepers improved, 107 remained unchanged and 32 deteriorated.

(4) 37 cases of perforating ulcers were met with. All were treated and improved with the exception of 12 cases which were still under treatment at the end of the year.

(5) Of 372 cases of leprosy reaction treated, 345 were light and 27 severe. All improved except 36 cases (33 light and 3 severe) which were still under treatment at the end of the year.

(6) A total of 102,290 dressings were applied to lepers during the year.

(7) Surgical operations performed on lepers numbered 193. These included 102 incisions, 3 piles, 87 widening of incisions and one amputation.

(8) 929 cases of skin diseases were met with consisting of 37 cases of scabies, 882 cases of dermatitis, 3 cases of tinea and 17 cases of urticaria. All the cases were treated and cured except 50 cases of dermatitis and two cases of tinea which were still under treatment at the end of the year.

(9) 18 cases of syphilis were treated.

(10) 510 cases of medical diseases were treated during the year, namely, 3 cases of cholecystitis, 5 cases of heart failure, 390 cases of gastro enteritis and 112 cases of general debility. All the cases were treated and improved.

(11) 121 cases of chest diseases were treated. These consisted of 2 cases of pulmonary T.B., 3 cases of asthma, 114 cases of bronchitis, and 2 cases of pneumonia.

(12) 3,923 patients attended the ophthalmic clinic and received treatment. 87 surgical operations were performed during the year namely : 11 cases of dilatation of lacrimal canal, 2 excisions, 12 skin and muscle, 5 tarsorrhaphy, 15 conjunctiva, 4 leprotic nodules, 31 cysts and 17 trichiasis. The ophthalmologist paid the colony 38 visits.

(13) 453 patients attended the dental clinic all of whom received treatment. Operations performed totalled 61 i.e. 59 extractions and two abscesses in the gums. The dentist paid the colony 42 visits.

(14) Parasitic cases numbered 159 namely : 157 bilharziasis and two ascaris. All were treated and cured with the exception of 5 cases of bilharziasis which were still under treatment at the end of the year.

(15) 327 samples of urine from patients and staff were examined at the laboratory of the colony and gave the following results : 157 bilharziasis, 75 salts and casts and 23 albumen.

(16) 277 samples of faeces were examined and gave the following results : 2 ancylostoma, 27 ascaris and 26 other parasites.

Staff Clinic :

The staff clinic was attended 1,725 times by the staff and their families or a ratio of 5 attendances daily. The cases treated included :

11 Renal colic.	193 Enteritis	5 Circumcisions.
5 Dysentery.	35 Bilharziasis.	2 Hemorrhagy.
4 Confinements.	87 Otitis.	17 Cystitis.
232 Incisions and wounds.	317 Collapse and debility.	447 Acidity.
8 Tuberculosis.	111 Malaria.	5 Eczema.
7 Ascaris.	25 Tonsillitis.	17 Scorpion sting.
175 Bronchitis.	3 Insomnia.	16 Constipations.
1 Piles.	33 Ophthalmic operations.	17 Teeth Extactions.
2 Mumps.	3 Ophthalmia.	15 Urticaria.
2 Jaundice.		

SOCIAL ACTIVITIES :

1.—*School* :

15 lepres attended the day school and 18 lepers attended the night classes.

2.—*Library* :

The library was visited by lepers at the rate of 395 times per month or an average of 11 times daily. Books were loaned to lepers at the rate of 147 per month or 5 books daily.

3.—*Preaching* :

Sermons are delivered during Friday prayers which have a good effect on the behaviour of the inmates.

4.—*Sports* :

A football team and a boyscout troop have been formed as a nucleus of a sporting club.

5.—*Recreation* :

Special interest is taken in the entertainment of inmates.

A troupe was formed from among the inmates to present some theatrical performances for the entertainment of lepers. Special meals were offered on particular events, e.g. Ramadan and feast days.

Prisons :

15 lepers were in detention undergoing sentences at the beginning of the year. 115 prisoners were admitted to the colony prison during the year and 113 prisoners were discharged, leaving 17 lepers in prison at the end of the year.

Industrial activities :

The various small workshops within the colony continued to be manned by lepers and performed all the industrial works required of them satisfactorily. Lepers perform other duties, e.g. attending bed-ridden patients, library, food-distribution, hair cutting, etc.

Agricultural Activities :

About 145 feddans (acres) have been reclaimed by the end of the year. This area was cultivated by the inmates under the guidance of the agricultural overseer. It produced as much crops as was required by the colony.

Besides, the agricultural team looks after the gardens within the colony, grows trees for shade and flowers for ornament. It also looks after the cattle, specially the gamoose for their milk. A total of 14,910.750 kgs. of milk were produced this year.

Water and Power Plants :

(1) The power plant produced a total of 50,649 kilo watts for lighting and water filtration.

(2) The pumping station lifted a total of 1,608,480 cubic metres of unfiltered water.

(3) The filtration plant filtered 140,992 cubic metres of potable water.

(4) The drainage plant lifted 46,331 cubic metres of sewage matter.

(5) The small electrical and mechanical workshop attached to these plants carried out all the repairs and maintenance of the machinery.

Amria Leprosy Colony :

The number of leprs in residence in the colony at the end of the year was 261. All were treated with hydnocarpus oil. Sulfone compounds were tried with satisfactory results. A total of 10,568 treatments were carried out and 43,800 dressings applied. 8,164 injections weighing 29 kilogrammes of hydnocarpus oil were given to residents.

Entertainment of Patients :

The residents are entertained on special events and feasts on the same lines as in Abu Zaabal Colony. Traditional meals are offered during Bairam and other occasions.

Potable Water :

The Colony draws its potable water from Noubaria Pumping Station of the Army Service Corps of the Ministry of War some 30 kilometres away. Water is stored in tanks and supplied to the wards by pipes.

Light :

There are five electric generators in the colony for lighting. These generators have been in a bad working condition since taken over. A general overhaul is being undertaken.

Sentries :

A police force consisting of one sergeant, 2 corporals and 18 men had stood guard at the colony. But the force has since been reduced to such an extent that 3 policemen exchange duty at each of the two gates of the colony.

Cairo Leprosy Hospital :

This hospital has, since 1929, been used for the segregation of female lepers. Since the buildings are not suitable for the purpose and the hospital lies in a crowded locality, arrangements have been made for the provision of a separate section in Abu Zaabal Colony for the accommodation of female lepers. This has been completed and the residents transferred to the colony. The hospital is now used as an out-patient clinic. It is proposed to use it as a preventorium for children of leprous parents.

Statistics :

Of 211 patients presenting themselves, 146 were found leprous. The remaining 65 patients suffered from other diseases.

Of the 146 lepers, 91 were of the anesthetic type, 45 of the tubercular type and 10 of the mixed type.

Out-patients :

Annexed to this hospital are three out patient clinics, namely :

- (1) Embaba clinic dealt with 20 new and 4,186 old patients.
- (2) Kara Midan clinic dealt with 109 new and 8,510 old patients.
- (3) Kaliub clinic dealt with 17 new and 3,034 old patients.

Treatment :

Hydnocarpus oil was again used in treatment. A total of 24,764 intramuscular injections weighing 78.252 kgrs. of oil were given to patients during the year. 7,714 dressings were applied to lepers during the year.

TABLE No. 143.—NUMBER OF PATIENTS IN LEPROSY UNITS DURING 1951 ACCORDING TO THEIR BIRTH PLACES AND RESIDENCE

Unit	Cairo		Alexandria		Damietta		Canal		Suez		Behera		Gharbia		Menoufia		Dakahlia		Starkia		Kaliubia		Giza	
	Birth	Residence	Birth	Residence	Birth	Residence	Birth	Residence	Birth	Residence	Birth	Residence	Birth	Residence	Birth	Residence	Birth	Residence	Birth	Residence	Birth	Residence	Birth	Residence
Abu Zaabal ...	3	3	3	3	1	1	—	—	—	—	5	5	11	11	11	11	9	9	3	3	4	4	8	8
Amria ...	—	2	2	—	1	1	—	—	—	—	4	4	3	3	5	3	3	4	1	—	1	—	—	—
Cairo ...	7	50	1	—	—	—	—	—	1	1	1	1	6	3	17	6	6	2	3	3	24	23	36	43
Zagazig ...	—	—	—	—	—	—	—	2	—	—	—	—	—	—	—	—	8	7	34	36	9	9	—	—
Souhag ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Tanta ...	—	—	—	—	—	—	—	—	—	—	1	1	40	40	11	11	2	3	—	—	—	—	—	—
Minia ...	—	—	—	—	—	—	—	—	—	—	17	16	6	3	2	—	—	—	—	—	—	—	—	—
Alexandria ...	—	—	—	5	16	—	—	—	—	—	—	—	14	14	—	—	33	33	—	—	—	—	—	—
Mansoura ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	66	66	—	—	—	—	10	10	—	—
Shebin el Kom ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Qena ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Beni Suef ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	2	1
TOTAL ...	10	55	11	21	2	2	—	2	—	—	28	27	79	74	112	97	61	57	42	42	48	47	46	52

TABLE No. 143.—NUMBER OF PATIENTS IN LEPROSY UNITS DURING 1951 ACCORDING TO THEIR BIRTH PLACES AND RESIDENCE (contd.)

Unit	Beni Suef		Fayoum		Minia		Assiut		Gerga		Qena		Aswan		Western Desert		Southern Desert		Sinai		Abroad		Total	
	Birth	Residence	Birth	Residence	Birth	Residence	Birth	Residence	Birth	Residence	Birth	Residence	Birth	Residence	Birth	Residence	Birth	Residence	Birth	Residence	Birth	Residence	Birth	Residence
Abu Zaabal	1	1	2	2	—	—	4	4	10	10	2	2	—	—	—	—	—	—	5	5	5	5	92	32
Amria	4	4	1	1	1	1	4	4	2	2	1	1	2	2	—	—	2	2	1	1	—	—	38	38
Cairo	1	—	3	—	3	2	9	1	15	4	3	3	3	1	—	—	—	—	2	2	1	1	146	146
Zagazig	—	—	—	—	—	—	—	—	—	—	3	—	—	—	—	—	—	—	—	—	—	—	54	54
Souhag	—	—	—	—	—	—	16	16	58	53	—	—	—	—	—	—	—	—	—	—	—	—	74	74
Tanta	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	9	9	—	—	63	63
Minia	—	—	—	—	42	43	15	15	—	—	—	—	—	—	—	—	—	—	—	—	1	—	58	58
Alexandria	1	—	—	—	—	—	—	—	—	—	4	—	—	—	—	—	—	—	—	—	1	—	35	35
Mansoura	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	2	—	—	19	49
Shebin el Kom	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	76	76
Qena	—	—	—	—	—	—	—	—	—	—	24	24	3	3	—	—	—	—	—	—	—	—	27	27
Beni Suef	38	40	4	4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	45	45
TOTAL	45	45	10	7	46	46	48	40	85	74	43	30	13	11	—	—	2	2	19	19	8	6	757	757

TABLE No. 144.—NUMBER OF PATIENTS ATTENDING LEPROSY UNITS DURING 1951

Unit	No. of Patients			General Notes on lepers										Transmission of infection												Age of Patients on first exam.					
	New Patients	Negative	Positive	Males	Females	Married	Unmarried	Egyptians	Foreigners	Moslems	Copts	Other Religions	Deny Inf.	Admit Inf.	Forgn. Inf.	Fam. Inf.	Father Only	Mother	Parents	Husband	Wife	Sons and daughters	Sisters	Relatives	Tubercular	Anesthetic	Mixed	from 1—10	11—20	21—30	
Abu Zaabal Colony ...	92	—	92	69	23	29	67	42	—	89	—	—	68	24	7	17	2	2	—	—	—	—	—	8	5	3	49	41	1	33	32
Amria Colony ...	38	—	8	38	—	9	21	38	—	36	2	—	30	8	2	6	1	—	—	—	—	1	1	2	—	17	21	2	6	16	
Cairo Hospital ...	11	65	146	118	28	76	70	145	1	139	7	—	120	26	8	18	2	—	—	—	—	2	1	4	9	10	91	45	—	39	53
Zagazig Hospital ...	89	35	54	34	20	25	29	54	—	53	1	—	44	10	—	10	1	2	—	—	—	1	3	3	5	27	22	3	16	15	
Souhag Clinic ...	74	—	74	51	23	34	40	74	—	63	11	—	73	1	—	1	1	—	—	—	—	—	—	—	—	46	28	7	22	15	
Tanta Clinic ...	24	211	63	42	21	32	31	63	—	63	—	—	59	4	—	4	1	—	—	—	—	—	—	—	3	36	20	5	18	21	
Minia Clinic ...	67	9	58	54	4	34	24	57	1	45	13	—	51	7	—	7	2	1	—	—	—	—	3	1	—	27	31	3	15	14	
Alexandria Clinic ...	96	61	35	20	15	22	13	35	—	35	—	—	32	3	—	3	—	1	—	—	—	—	2	—	2	12	21	3	8	16	
Mansoura Clinic ...	71	22	49	32	17	24	25	48	—	48	1	—	42	7	—	7	2	—	—	—	—	1	2	2	—	30	11	5	13	19	
Shebin el Kom Clinic ...	755	679	76	50	26	38	38	70	—	73	3	—	61	15	—	15	2	4	—	—	—	1	6	2	16	35	25	6	26	17	
Qena Clinic ...	31	4	27	26	1	15	12	27	—	23	4	—	27	—	—	—	—	—	—	—	—	—	—	—	1	16	10	—	3	9	
Beni Suef Clinic ...	45	—	45	30	15	21	24	45	—	43	2	—	37	8	—	8	1	1	—	1	—	1	3	1	7	24	14	1	15	8	
TOTAL ...	1843	1086	757	564	193	359	398	755	2	710	47	—	644	113	17	96	15	11	—	1	3	6	32	28	51	409	297	41	214	23	5

TABLE No. 144.—NUMBER OF PATIENTS ATTENDING LEPROSY UNITS DURING 1951 (contd.)

Unit	Age of Patients on first exam				Age of patients on appearance of disease												Duration of Disease								Laboratory finding				
	31—40	41—50	51—60	60 and over	from 1—5	6—10	11—15	16—20	21—25	26—30	31—35	36—40	41—45	46—50	51—55	56—60	Over 60	One year	Two years	3—5 years	6—10 years	11—15 years	16—20 years	21 and over	Neg. B.	Pos. B.	Nose only	Skin only	N. and S.
Abu Zaabal Colony ...	20	5	1	—	—	3	22	23	10	10	6	3	2	3	—	—	—	10	23	34	13	4	—	2	23	69	18	19	32
Amria Colony ...	9	3	2	—	1	5	6	10	5	3	4	—	2	1	—	—	—	—	4	10	14	6	3	1	17	21	1	2	18
Cairo Hospital ...	23	16	9	1	—	6	22	29	26	18	14	8	7	6	4	6	—	49	37	43	14	2	1	80	66	10	3	52	
Zagazig Hospital ...	3	4	1	2	2	6	6	10	8	5	5	5	3	—	1	1	2	15	15	20	3	—	1	—	27	27	—	2	25
Souhag Clinic ...	10	8	7	5	1	8	9	12	8	6	5	3	3	9	4	3	3	3	10	41	12	8	—	—	—	74	48	—	26
Tanta Clinic ...	8	7	3	1	3	3	9	14	10	7	2	4	2	4	2	2	1	32	10	17	4	—	—	—	25	38	10	1	27
Minia Clinic ...	15	6	5	—	1	11	6	6	10	8	—	2	3	2	2	—	—	3	11	38	4	2	—	—	27	31	2	12	17
Alexandria Clinic ...	4	2	1	1	4	—	2	5	14	3	7	2	—	1	1	—	1	8	6	15	6	—	—	—	13	22	—	4	18
Mansoura Clinic ...	9	2	1	—	1	5	5	10	8	11	3	5	—	—	1	—	—	13	14	20	2	—	—	—	13	21	17	—	19
Shebin el Kom Clinic ...	15	6	6	—	3	7	12	13	6	9	3	13	—	3	2	3	1	9	34	33	—	—	—	—	25	41	—	1	40
Qena Clinic ...	7	5	3	—	—	3	5	4	3	4	4	2	5	—	—	—	—	2	3	19	3	—	—	—	17	10	—	—	10
Beni Suef Clinic ...	11	5	3	2	7	—	9	5	7	5	12	3	1	3	1	—	2	18	10	9	6	1	1	—	—	45	21	10	14
TOTAL ...	144	69	42	12	24	57	113	141	125	89	55	50	28	32	18	15	10	168	177	29	81	23	5	4	277	480	128	54	298

PART V—RESEARCHES AND LABORATORY EXAMINATIONS

Chapter XXV—Summary of the Work of the Department of Laboratories

1.—BACTERIOLOGICAL SECTION.

The total number of specimens examined bacteriologically in the Central, Provincial and Branch Laboratories during the year 1951 amounted to 547,603.

2.—CLINICAL PATHOLOGICAL SECTION

6,608 specimens were examined in the Section during the year under review.

3.—CHEMICAL SECTION.

The total number of samples examined chemically in the Central Laboratories as well as in the Tanta and Assiut Laboratories, during the year 1951 was 93,509.

4.—WATER SECTION.

(a) *Bacteriological Service :*

The total number of samples of water, aerated water, ice and syrup, examined by this Service during the year 1951, amounted to 7,584.

(b) *Chemical Service :*

During the year under review, 1,578 samples of water were subjected to chemical analysis.

5.—ANTIRABIC INSTITUTE AND HOSPITAL.

During the year 1951, 9,895 patients attended the Institute at Cairo. Of these, 9,590 were fully treated.

The number of patients who attended the Antirabic units at Alexandria and Luxor amounted to :—

Alexandria: 1,309 of whom 941 were fully treated.

Luxor: 528 of whom 498 were fully treated.

6.—SERUM AND VACCINE LABORATORY, AGOUZA.

The following sera and vaccines were prepared during the year 1951.

TABLE No. 145

Sera and Vaccines	Quantities Prepared
T.A.B.	648,875 ccs.
Anti-cholera vaccine	1,200,000 ccs.
Anti-plague vaccine	180,000 ccs.
Calf lymph vaccine	18,325,000 doses.
Diphtheria prophylactic (formal toxoid) {	398,250 Bottles of 20 ccs.
	2,500 Boxes(each for 1 person)
Diphtheria antitoxin	2,895 Ampoules of 1000 I.U.
Anti-tetanus	39,755 Ampoules.
Anti-scorpion	50,584 Ampoules.

Chapter XXVI—Research Institute and Hospital for Tropical Diseases

The Institute comprises the following technical sections :

- (1) Helminthology.
- (2) Protozoology.
- (3) Entomology.
- (4) Biochemistry.
- (5) Clinical Pathology.
- (6) Pharmacology.
- (7) Haematology.
- (8) Bacteriology.
- (9) Virology.
- (10) Radiology.
- (11) Cancer Research.
- (12) Experimental Animals.
- (13) Clinical section and Hospital.
- (14) Organic Chemistry.
- (15) Library.

The following units are also attached to the Institute :

- (1) Khanka Malaria Research Station.
- (2) Fayed Malaria Research Station.
- (3) Filariasis Research Unit in Rosetta.
- (4) Filariasis Research Unit in the Pyramids Area.

Researches of the Institute for the Year 1951.

(1) Amoebiasis in Egypt: Recent knowledge regarding its diagnosis, incidence and treatment with Aureomycin. By Dr. A. Halawani, Dr. A. Abdallah and Dr. M.I. El Kordy.

(2) Terramycin in the Treatment of Amoebiasis By Dr. Gamal Nor el Din.

(3) On Pentachlorophenol and Pentabromophenol as Molluscicides in Prevention of Bilharziasis.—By Dr. A. Halawani, Nazih Latif and Dr. A. Taha.

(4) Hormonal therapy in vesical tumours.—By Dr. Wadie Tadros and Dr. Gamal Nor el Din.

(5) Endemic Diseases Control.—By Dr. A. Halawani.

(6) Treatment of Tropical Diseases.—By Dr. A. Halawani.

(7) Aureomycin in the Treatment of Malaria.—By Dr. G. Nor El Din.

(8) Recent Advances in the Treatment of Intestinal Parasites.—By Dr. Gamal Nor El Din.

(9) Aureomycin, Terramycin, and Chloromycetin in chronic urinary infection.—By Dr. Gamal Nor El Din.

(10) Recent views in the treatment of malaria, the trial of a new drug. (Abadol). By Dr. Gamal Nor El Din.

(11) Resotren: A new therapeutic agent for Amoebiasis. A preliminary report. By Dr. A. Halawani, Dr. A. Abdallah, and Dr. M.I. El Kordy.

(12) Bilharziasis in Bilad el Nuba in Egypt.—By Dr. M.M. Dawood.

Summary of the Clinical Section Report for the Year 1951.

7,583 patients frequented the outpatient department during the year 1951. All of them were thoroughly examined and investigated. Among them, 1,641 patients were found suffering from organic diseases.

For treatment of Bilharziasis in the out-patient, a freshly prepared solution of Repodral or Stibophen was used. The dose given was 5 ccs. intramuscularly daily for ten consecutive days, i.e. total dose given was 50 ccs. per course for an adult weighing 60 Kgms. or more

1,268 patients were treated, and the general percentage of apparent cures was found to be 85%.

The number of patients infested with ancylostoma amounted to 927, 26% of whom suffered from severe anemia. Carbon tetrachloride was used in their treatment and 50.3% among those treated became negative for ancylostoma after a single purge.

868 patients infested with ascaris worms were treated with oil of chenopodium, or crystoids, or thick coated hexylresorcinol capsules, or Hetrazan tablets. A comparative study was done to evaluate the results of treatment.

Cases of taeniasis were treated with atebirin tablets, the result was 66% cures.

Cases of Hymenolepis nana infection were treated with chloroquine and Atebrin tablets, whereas Gentian violet pills, Alloxyn and Eggressin were administered to patients infested with Oxyuris. The results of treatment were comparatively studied.

In the in-patient, the study of the different brands of Miracil (Nilodine) in the treatment of bilharziasis by the oral route was continued during the year 1951. Different new drugs were tried in cases of amoebiasis and their therapeutic effects were evaluated. The incidence of Hepato-splenomegaly in schistosomiasis, and its relation to the anaemia present in these cases is under investigation.

Report of the Chemistry Section:

(1) A new spectrophotometric method has been designed for the assay of Fouadin and similar drugs.

(2) The absorption spectra of both Miracil A and D has been carried out.

(3) Gammexane was prepared in the laboratory on a small scale.

(4) Pentachlorophenol and Pentabromophenol were prepared in the laboratory and their effects as molluscicides were studied.

(5) The Polarographic determination of antimony in the blood was carried out.

(6) The study of the effect of bilharziasis on the levels of both sodium and potassium in blood has been carried out.

(7) 3,172 samples of blood, urine, gastric juice etc. were analysed for different biochemical tests.

Summary of the report of the Bacteriology Department:

(1) 3,261 specimens (Urine, blood etc.) were examined for different bacteriological and serological tests during the year 1951.

(2) Samples were collected from cattle and sheep in Cairo, sera were tested by the C.F.T. for the Q fever. This work is continuing.

(3) Smears were taken from the throats of out-patients to search for meningococcal carriers.

Summary of the report of the Protozoology Section.

(1) A survey of the incidence of E. histolytica infection in some villages near the Pyramids was done.

(2) A new simple method for the staining of intestinal protozoa was done.

Experimental Animal Section :

(1) Testing various compounds on bilharziasis in snails was performed, together with their effect on the corresponding snails.

(2) The section follows the breeding of mosquitoes, its infection with filaria and the infection of monkeys and mice with microfilaria.

(3) The section works at the present time on the maintenance of *Trypanosoma cruzi* in mice for future experimentation.

(4) Coccidiosis in rabbits and its treatment is under investigation.

Malaria and Entomological Section.

The section received 15,098 thick drops of blood for parasitic examination, as well as 571 samples for entomological examination, and 250 samples of snails collected by palm leaf traps.

At the Khanka Malaria Research station, all breeding places of mosquitoes were cleared and periodically sprayed with D.D.T. solution in malariol. Rice fields were also sprayed to control anopheles breeding. A survey was done in this area to find out if there was any relation between pellagra, intestinal parasites and bilharziasis.

27,294 thick drops were examined for malaria at the Khanka station during the year 1951 and positive cases were effectively treated. Similarly 11,462 blood samples were examined in the Malaria Station in Fayed and breeding places were cleaned and sprayed.

In Rosetta, blood specimens were taken from 4,465 cases and examined for microfilaria. Positive cases (4.1%) were treated with Hetrazan. Breeding places such as wells, swamps and stagnant lakes were filled in, and drains were sprayed.

Chapter XXVII—Summary of the Work of the Memorial Ophthalmic Laboratory Giza, 1951.

The work of the Memorial Ophthalmic Laboratory during 1951 falls, as in previous years, under 4 main categories :

1.—*Research*.—Field experiments on the bacteriology, epidemiology and prevention of the acute ophthalmias continued, and considerable advances have been made in this connection.

As a result of extended trials at the Laboratory with new combinations of drugs, the treatment of this disease has become effective, safe and inexpensive.

With regard to the more important problem of prevention, this is now reduced to finding practical means of applying on a larger scale preventive measures which have proved effective in the experimental villages.

2.—*Routine Pathology*.—In the course of this year, 207 pathological specimens were reported upon. Nearly 6,000 bacteriological examinations were carried out.

3.—*Clinical Department*.—Many patients were referred to the Laboratory for special examination, second opinion or treatment. Some of these cases have merited publication in scientific journals.

4.—*Post-graduate Instruction*.—The members of the Staff of the Laboratory again gave courses of lectures and demonstrations to post-graduate students taking the Diploma of Ophthalmic Medicine and Surgery.

Library :

Again many volumes of journals and scientific books have been added to the library of the Laboratory, thus enriching its collection.

Museum :

During the year, 6 interesting pathological specimens were added to the museum of the Laboratory.

Appendix I. — REPORT ON THE WORK OF THE CENTRAL,
GOVERNORATE AND PROVINCIAL MEDICAL COMMISSIONS
DURING THE YEAR 1951

The Central Medical Commission ;

The number of medical certificates issued by the Central Medical Commission during 1951 was 30,528 certificates.

Of this number, 14,822 concerned candidates for government service or educational missions abroad who were examined by the Central Medical Commission. These consisted of 11,038 candidates for permanent or temporary posts, 126 for educational missions and 3,658 for hors cadre posts.

58.63% of the first and second groups and 48.36% of the last group passed the medical examination. Of the 44.06% failures in the first and second groups, 26.18% failed in vision — myopia and trachoma accounting for most of them ; 6.55% for defects of the urinary system. — albumen or traces thereof were the main cause ; 1.02% for heart diseases—incompetency of the heart was the main complaint, and 7.25% for other diseases, e.g. varicoceles, hydroceles not treated or removed by operation, deformation, debility or respiratory diseases. Of the 51.65% failures in the last group, 34.16% failed in vision—myopia accounting for most of them ; 8.58% for defects of the urinary system, albumen or traces thereof were the main cause ; 1.01% for heart diseases, with incompetency of the heart as the main complaint and 7.22% for other diseases, e.g. varicoceles, hydroceles not treated or removed by operation, deformation, debility, flat foot or respiratory diseases.

A total of 13,414 medical certificates dealt with leaves granted to government officials reporting sick. These consisted of 9,599 pensionable and temporary officials and 3,815 hors cadre employees. Of those granted sick leaves by the Central Medical Commission or by the Cairo Medical Officers of Health and approved by the Central Medical Commission, 3,998 pensionable and temporary officials and 1,402 hors cadre employees were found suffering from medical diseases and 1,440 pensionable and temporary officials and 490 hors cadre employees suffered from surgical and ophthalmic diseases.

Herebelow are the diseases accounting for the sick leaves and the ratios of their prevalence :

TABLE No. 146

Diseases	P. and T. Officials		H.C. Employees	
	Number	Ratio to total	Number	Ratio to total
		%		%
Nose and Larynx	273	5.01	42	2.22
Bronchi and Lungs	355	6.53	182	9.62
Heart and Blood Circulatory System	376	6.91	19	1.01
Stomach and Intestines	170	3.13	42	2.21
Liver	054	0.99	21	1.11
Kidneys and Cystis	141	2.59	48	2.53
Neurasthenia	176	3.34	8	0.42
Mental Diseases	328	6.02	247	13.05
Nervous System	094	1.74	3	0.16
Anaemia and General Debility	812	14.94	105	5.55
T.B.	369	6.78	292	17.50
Syphilis	6	0.11	—	—
Rheumatism	481	8.84	162	8.51
Fevers... ..	43	0.79	26	1.37
Other Medical Diseases	320	5.88	166	8.77
Eye Diseases	171	3.25	41	2.17
Ear Diseases	50	0.92	12	0.63
Appendicitis	41	0.75	4	0.21
Herniae	60	1.13	17	0.89
Fistulae	33	0.64	33	1.74
Piles	123	2.22	41	2.16
Hydroceles	19	0.34	11	0.65
Urinary System and Stones	126	2.32	39	2.06
Various Surgical Operations	511	9.43	187	9.88
Fractures	226	4.00	84	4.47
Dental Diseases	80	1.40	21	1.11

60,324 officials and employees were granted from 1-10 days sick leave by Cairo medical officers of health and by Markaz and Sanitary outposts in all the provinces and governorates during the year 1951. Of these, 41,311 or 67.64% suffered from medical diseases ; 13,527 or 22.42% suffered from surgical diseases; and 5,486 or 9.94% suffered from ophthalmic diseases. The total number of days sick leave granted to the pensionable and temporary officials only amounted to 238,422.

1,366 pensionable and temporary officials and 495 hors cadre employees in Cairo only were granted from 1-10 days sick leave by the Central Medical Commission or by Cairo Medical Officers of Health.

2,783 pensionable and temporary officials and 1,103 hors cadre employees were examined by the Central Medical Commission but were not granted any sick leave.

4,072 pensionable and temporary officials and 1,397 hors cadre employees were granted from 1 to 30 days sick leave and over by the Central Medical Commission and by Cairo Medical Officers of Health.

The Central Medical Commission granted 26 pensionable and temporary officials longer sick leaves terminating by their retirement on pension; and pronounced 129 hors cadre employees medically unfit for further service.

PROVINCIAL AND GOVERNORATE MEDICAL COMMISSIONS

A total of 43,629 medical certificates were issued by the Provincial and Governorate Medical Commissions during the year 1951.

TABLE No. 147.—CANDIDATES FOR PILOT LICENCES EXAMINED BY THE CENTRAL MEDICAL COMMISSION DURING THE YEAR 1951

LICENCE	Fit 1st Session	Fit 2nd Session	Fit 3rd Session	Unfit 1st Session	Unfit 2nd Session	Unfit 3rd Session	Total
Private Pilot	35	1	1	30	3	1	71
Flight Radio Operator	2	—	—	1	—	—	3
Commercial Pilot	37	—	1	2	1	—	41
Airline Transport Pilot	27	2	—	2	—	—	31
TOTAL	101	3	2	35	4	1	146

TABLE No. 148.—PILOTS EXAMINED FOR RENEWAL OF LICENCES

LICENCE	Fit 1st Session	Fit 2nd Session	Fit 3rd Session	Unfit 1st Session	Unfit 2nd Session	Unfit 3rd Session	Total
Private & "A" Licence	81	—	—	7	1	1	90
Flight Radio Operator	26	—	—	—	—	—	26
Commercial Pilot and B Licence	93	1	—	4	1	—	99
Airline Transport Pilot	—	1	—	1	—	—	2
TOTAL	200	2	—	12	2	1	217

TABLE No. 149.—ANNUAL REPORT ON THE WORK OF THE CENTRAL,

	Objects of					
	Number					
	For Admission to Service					
	Pensionable and Temporary				Hors Cadre	
	Fit	Unfit	Rejected in 1st Session	Rejected in 2nd Session	Fit	Unfit
Central Medical Commission	6,456	917	2,965	700	1,769	1,889
Provincial and Governorate Medical Commissions... ..	648	222	72	18	9,193	9,147
TOTAL	7,104	1,139	3,037	718	10,962	11,036
	Cause of Rejection of Candidates					
	Dise					
	Defective Vision		Urinary System		Respiratory System	
	P. & T.	H. O.	P. & T.	H. O.	P. & T.	H. O.
Central Medical Commission	2,965	1,279	732	314	76	42
Provincial and Governorate Medical Commissions	270	6,675	25	1,586	1	220
TOTAL	3,235	7,954	757	1,900	77	262

PROVINCIAL AND GOVERNORATS MEDICAL COMMISSIONS DURING THE YEAR 1951

Medical Examination

of Cases

Candidates for Missions				For Sick Leave				Invaliding				For Determination of Age		Other Examinations				TOTAL
Fit	Unfit	Rejected in 1st Session	Rejected in 2nd Session	Granted		Refused		Unfit		Fit		P. & T.	H. C.	P.&T.	H.C.	Other Cases		
				P. & T.	H. O.	P. & T.	H. C.	P. & T.	H, C,	P. & T.	H. C.					P. & T.	H. C.	
89	19	16	2	6.816	2.712	2.783	1.103	49	183	19	47	77	307	1.168	3	275	164	30.528
—	—	—	—	8.027	6.953	1.110	1.188	31	1.844	33	1.431	48	2.388	—	45	257	973	43.629
89	19	16	2	14.843	9.665	3.893	2.291	80	2.027	52	1.478	126	2.695	1.168	48	532	1.137	74.157

applying for Entry to Service

ases

Circulatory System		Nervous System		Digestive System		Other Systems		TOTAL	
P. & T.	H. O.	P. & T.	H. O.	P. & T.	H. O.	P. & T.	H. O.	P. & T.	H. C.
115	37	2	—	—	—	729	218	4·619	1·890
2	56	—	—	—	8	14	602	312	9·147
117	93	2	—	—	8	743	820	4·931	11·037

TABLE No. 150.—CLASSIFICATION OF DISEASES CONTRACTED BY OFFICIALS AND EMPLOYEES
MEDICAL COMMISSIONS AND BY THE DISTRICT M.Os. IN CAIRO AND

DISE

Medical

	1		2		3		4		5		6	
	Nose and Larynx		Bronchi and Lungs		Heart and Cir. System		Stomach and Intestines		Liver		Kidneys and Cystitis	
	P. & T.	H. C.	P. & T.	H. C.	P. & T.	H. C.	P. & T.	H. C.	P. & T.	H. C.	P. & T.	H. C.
Central Medical Commission	273	42	355	182	376	19	170	42	54	21	141	48
Provincial and Governorate Medical Commissions	288	171	1,067	911	480	213	713	512	535	200	411	310
TOTAL	511	213	1,356	1,033	856	232	883	554	589	221	552	358

DISE

Surgical and

	1		2		3		4		5		6	
	Eye Diseases		Ear Diseases		Appendicitis		Hernia		Fistula		Piles	
	P. & T.	H. C.	P. & T.	H. C.	P. & T.	H. C.	P. & T.	H. C.	P. & T.	H. C.	P. & T.	H. C.
Central Medical Commission... ..	171	41	50	12	41	4	60	17	33	33	123	41
Provincial and Governorate Medical Commissions	127	139	58	24	75	59	58	86	70	57	136	129
TOTAL	298	180	106	41	117	63	116	103	103	90	259	170

FOR WHICH SICK LEAVES WERE GRANTED BY THE CENTRAL, PROVINCIAL AND GOVERNORATE
APPROVED BY THE CENTRAL MEDICAL COMMISSION DURING THE YEAR 1951

ASES

Diseases

7		8		9		10		11		12		13		14		15		TOTAL	
Nervousness		Mental Diseases		Nervous System Cereb. and Cord		Anaemia and General Debility		T. B.		Syphilis		Rheumatism		Fever		Other Medical Diseases			
P. & T.	H. C.	P. & T.	H. C.	P. & T.	H. C.	P. & T.	H. C.	P. & T.	H. C.	P. & T.	H. C.	P. & T.	H. C.	P. & T.	H. C.	P. & T.	H. C.	P. & T.	H. C.
176	8	328	247	94	3	812	105	369	292	6	—	481	162	43	26	320	166	3,998	1,402
217	96	7	15	31	23	796	750	181	313	17	—	1,211	720	219	264	397	394	6,521	4,951
393	104	335	262	125	26	1,618	861	550	605	23	—	1,693	862	262	290	717	560	10,519	6,353

ASES

Ophthalmic Diseases

7		8		9		10		11		TOTAL	
Hydroceles		Urinary System and Stones.		Other Surgical Operations		Fractures		Dental			
P. & T.	H. C.	P. & T.	H. C.	P. & T.	H. C.	P. & T.	H. C.	P. & T.	H. C.	P. & T.	H. C.
19	11	126	39	205	187	226	84	80	21	1,440	490
35	45	135	49	513	888	211	460	93	36	1,506	2,022
52	56	261	133	1,024	1,075	437	543	173	57	2,946	2,512

Appendix II—DETAILS OF BUDGET GRANTS AND ACTUAL EXPENDITURES AND DETAILS OF POSTS

CENTRAL ADMINISTRATION

TABLE No. 151.—BUDGET CREDITS

TITLES	Budget grants		Actual Expenses	
	1950	1951	1950	1951
TITLE I				
Salaries, Wages and Allowances	953,541	1,117,902*	877,619	954,195
TITLE II				
General Expenditures	1,720,050	1,599,825†	1,693,745	1,476,263
TITLE III				
New Works	798,250	951,620	635,577	471,381
TOTAL	3,471,841	3,669,347	3,206,941	2,901,839

* A credit of L.E. 2,400 is included under this title representing salaries and allowances for the Museum of Hygiene.

† An additional credit of L.E. 170,000, included under this title, was granted by Law No. 22 of 1952.

DETAILS OF POSTS

Posts	1950	1951
<i>Permanent Posts</i>		
Senior Technical and Administrative Posts... ..	868	907
Intermediate Technical Posts	725	776
Clerical Posts	705	736
<i>Temporary Posts</i>		
Technical Posts	—	1
Clerical Posts	198	201
<i>Hors Cadre Personnel</i> ...	5,146	5,515
TOTAL	7,642	8,336

MEDICAL TREATMENT DEPARTMENT

TABLE No. 152.—BUDGET GRANTS

Title	Budget Grants		Actual Expenses	
	1950	1951	1950	1951
TITLE I				
Salaries, Wages and Allowances	475,800	523,802	399,362	70,947
TITLE II				
General Expenditures	660,400	898,360	659,843	182,521
TITLE III				
New Works	504,500	275,700	139,807	160,169
TOTAL	1,640,700	1,697,862	1,199,012	413,637

DETAILS OF POSTS

Posts	1950	1951
<i>Permanent Posts</i>		
Senior Technical and Administrative Posts ...	667	757
Intermediate Technical Posts	291	352
Clerical Posts	174	204
<i>Temporary Posts</i>		
Technical Posts... ..	143	173
Clerical Posts	48	50
<i>Hors Cadre Personnel</i> ...	3,766	4,581
TOTAL	5,089	6,117

PREVENTIVE MEDICINE DEPARTMENT

TABLE No. 153.—BUDGET GRANTS

TITELS	Budget Grants		Actual Expenses	
	1950	1951	1950	1951
TITLE I				
Salaries, Wages and Allowances	588,660	644,000	587,599	611,875
TITLE II				
General Expenditures.	419,000	460,488	404,892	344,043
TITLE III				
New Works	117,700	84,300	81,110	5,575
TOTAL	1,125,360	1,188,788	1,073,601	961,493

DETAILS OF POSTS

Posts	1950	1951
<i>Permanent Posts</i>		
Senior Technical and Administrative Posts ...	356	366
Intermediate Technical Posts	516	531
Clerical Posts	420	436
<i>Temporary Posts</i>		
Technical Posts... ..	—	—
Clerical Posts	103	105
<i>Hors Cadre Personnel</i> ...	2,914	3,168
TOTAL	4,309	4,606

RURAL HEALTH DEPARTMENT

TABLE NO. 151.—BUDGET GRANTS

TITLE	Budget Grants		Actual Expenses	
	1950	1951	1950	1951
TITLE I				
Salaries, Wages and Allowances	247,524	273,991	204,750	228,095
TITLE II				
General Expenditures.	165,000	177,100	136,419	103,668
TITLE III				
New Works	327,400	446,500	123,931	115,550
TOTAL	739,924	897,591	465,100	447,313

DETAILS OF POSTS

Posts	1950	1951
<i>Permanent Posts</i>		
Senior Technical and Administrative Posts ...	267	186
Intermediate Technical Posts	455	499
Clerical Posts	264	282
<i>Hors Cadre Personnel</i> ...	3,651	3,788
TOTAL	4,637	4,855

Appendix III.—STORES

The Stores Department continues as usual to provide the units of the Ministry with modern medical equipment and drugs. Besides, the Stores Department has during this year equipped the following new hospitals and units :

I.—*Central Administration :*

- (1) New bilharzia eradication units.
- (2) Mass bilharzia treatment.
- (3) Progressive bilharzia treatment.
- (4) In-patient sections within ancylostoma branches at Dessouk and Nag Hamadi.
- (5) Chest Diseases units at Aswan, Belkas, Deirout, Menouf, Mellawi, Beni Suef, Suez and Assiut.
- (6) Two B.C.G. mass vaccination teams.
- (7) A preventorium at Port Said.
- (8) A technical statistics office in the Chest Diseases Section.
- (9) Child welfare centres at Ismailia, Suez, Damietta and Dekernis.
- (10) Two venereal diseases units at Belkas and Belbeis.
- (11) Application of the bilharzia snail law.
- (12) Health propaganda.
- (13) The Rabies branch at Alexandria.
- (14) Three malaria stations.
- (15) The bone surgery hospital at Helwan.
- (16) Amria leprosy colony.
- (17) Kassaseen sanatorium.
- (18) Sera and vaccines laboratory.
- (19) Insulin project.
- (20) The water section of the laboratories department.

II.—*Medical Treatment Units :*

- (1) Chronic diseases hospital at Helwan.
- (2) 26 general or district hospitals at Tanta, Hehya, Teh el Baroud, Maghagha, Abul Matamir, Biala, Kafr el Dawar, Faccous, Belbeis, Sherbin, Sinbellawein, Dessouk, Belkas, Manfalout, Sennouris, Abnoub, Tema, Abshaway, Menouf, Mallawi, Port Said, Deirout, Shukri Pasha, Bab el Shaaria, Mansoura and Bihout.
- (3) An ear, nose and throat unit at Suez.
- (4) A gynaecological section at Ayat hospital.
- (5) 15 ophthalmic units at Menouf, Hehya, Mellawi, Teh el Baroud, Abul Matamir, Bihout, Belkas, Deirout, Dirr, Inshas and Mataana.
- (6) Four schools for pupil nurses.
- (7) Dental sections in district hospitals.
- (8) A treatment unit at Dirr.

III.—*Preventive Medicine Units :*

- (1) Five fever hospitals at Aswan, Dessouk, Gerga, Tahta and Fayoum.
- (2) Public Health Offices at Fouadia, Kafr el Sheikh, Sidi Barrani and Eastern and Western Desert Governorates.

The following new units were opened during the year :—

- Three hospitals at Maghagha, Sennouris and Manshia (Shukri Pasha).
- An ophthalmic branch at Sennouris.
- A preventorium affiliated to Port Said Sanatorium.

A chest diseases dispensary within Marg Convalescents settlement.
 A mosquito control area at Dakhla oasis.
 Three public health offices at Giza, Ismailia and Hassan Pasha.
 Two fever hospitals at Ayat and Dessouk.
 Salama Abdulla child welfare foundation with a 12-bed in-patient section.
 A 12-bed in-patient section at Suez child welfare centre.
 A 10-bed in-patient section at Damietta child welfare centre.
 A bilharzia control inspection at Siouf for northern Behera.
 Two hospitals at Sollum and Sidi Barrani.

15 new village health centres accommodated in government premises at Tor, Mit Gharita, Mit Dorein, Kufour Negm, Kafr el Wekala, Dimeira, Abu Ghanima, Shubra Bas, Tanan, Beni Ebeid, Sanabo, Nazlet Emara, El Zok el Sharkia, Faw Bahari and Idlib villages.

A village health centre at Madmar, accommodated in rented premises.

12 public bath-houses outside the health centres at Beni Ebeid, Batanoun, Ganzour, Sers Layan, Sers Layan 11, Maymoun, Naga Saba, El Bashna, Balvia, El Borsha, El Ezba and El Ghanayem villages.

TABLE No. 155.—SUPPLY TRANSACTIONS DURING 1951.

Subject	Number
Questions submitted to contracts board	1,995
Meetings held by contracts board	281
General Adjudications	241
Tenders submitted in connection of general adjudications	1,304
Local adjudications	141
Tenders submitted in connection with local adjudications	132
Number of contracts	626
„ „ agreements	4
„ „ Local orders	164
„ „ Foreign orders... ..	21
Forms 50 C.G. Payment Vouchers	3,023
Purchases by negotiation	58

